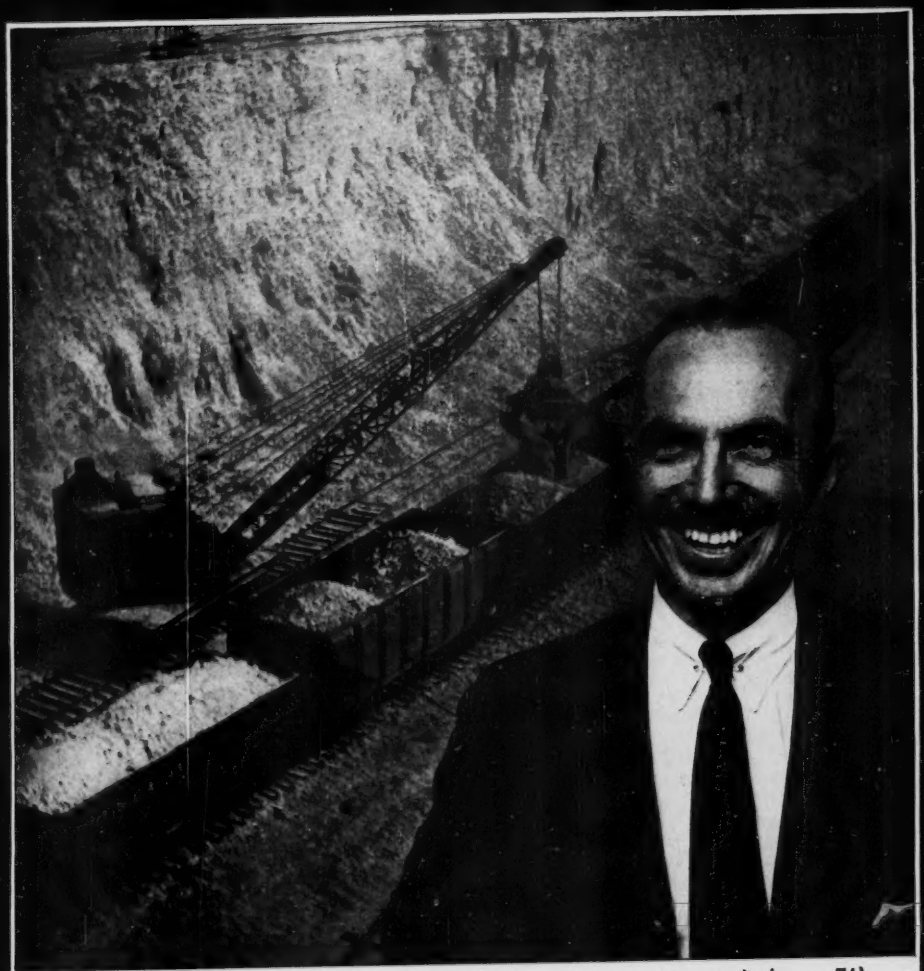
BUSINESS WEEK

END OF BRIGHAM YOUNG'S
Salt Lake City
PAGE 80



Freeport Sulphur's Wight: Best cure for a shortage is a greater supply (page 76)

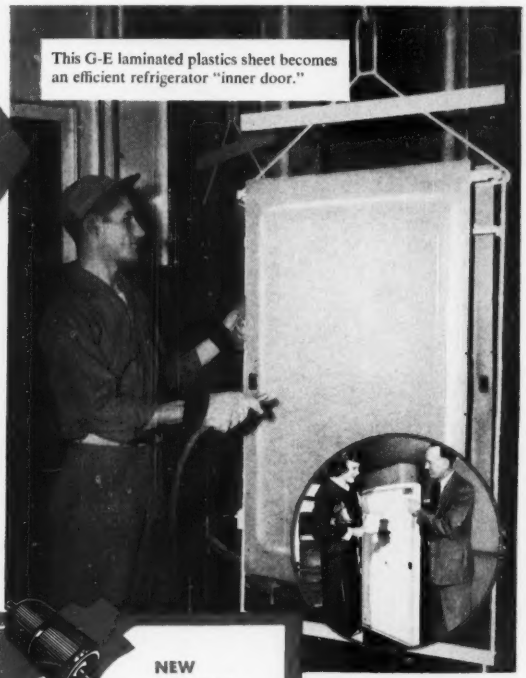
A McGRAW HILL PUBLICATION

SEPT. 1, 1951

Chemical Progress

News of developments from General Electric's Chemical Division that can be important to your business.

G-E PLASTICS IMPROVE REFRIGERATOR "DOORS WITHIN DOORS"



This G-E laminated plastics sheet becomes an efficient refrigerator "inner door."

The development of superior resins and varnishes for the plastics laminating industry is one contribution of General Electric's chemical research.

Large refrigerator manufacturers are using General Electric laminated plastics for refrigerator "inner doors"—with advantages to both themselves and their customers. By using lightweight plastics (instead of metal) they benefit by easier handling during assembly, reduced shipping charges and less scrap loss.

The greater design flexibility of plastics makes possible a better-looking, more salable product. And refrigerator users get a lighter, quieter, "non-slamming" door with excellent insulating qualities.

G-E CHEMICAL PRODUCTS SPEED NATIONAL DEFENSE

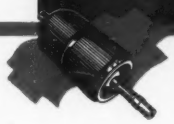
Plastics-laminated and insulating products are prominent among G-E contributions to the defense effort. Among them are:

G-E 1201 Glyptal* Red Enamel—an insulating, sealing and finishing enamel which offers great protection to motor windings under severe service conditions.

A full line of plastics laminates—either molded or in the form of sheets, tubes and rods—with cloth, paper, glass fabric or special bases for a wide variety of applications.

A complete line of insulating products—silicone insulation, insulating varnishes, sealing and filling compounds, mica insulation, varnished cloths and tapes.

* Reg. U. S. Pat. Off.



NEW SILICONE INSULATION

General Electric silicone insulating resins are being specified by manufacturers when electrical equipment is to operate at high temperatures, or subject to frequent overload conditions. This new Class H insulation has a temperature range between 120-160 F. above that obtainable with conventional insulating materials.

WANT MORE INFORMATION?

For more details about any of the G-E chemical products mentioned on this page, just write to Chemical Division, General Electric Company, Pittsfield 15, Massachusetts.

PLASTICS COMPOUNDS • SILICONES • INSULATING MATERIALS • GLYPTAL® ALKYD RESINS • PLASTICS LAMINATING, MOLDING, AND EXTRUDING

You can put your confidence in

GENERAL ELECTRIC

Thinking
Inventing
Building TO MEET THE COUNTRY'S TELEPHONE NEEDS

The responsibility of the Bell System does not consist of merely supplying good telephone service today. We have to be always creating so that the service grows better and better.

THE CALL FOR PROGRESS

This process of creation can never stop, for the country's telephone needs are continually changing and increasing. So we must always be thinking ahead and inventing ahead and building for the future. This is what the country looks to us to do and we are doing it. It is especially important in these days of national defense.

The pre-eminence of telephone research and manufacturing reflects a dynamic policy and point of view throughout the business. The people needed to come up with new ideas and put them into action are constantly being encouraged and given opportunity.

We shall continue to meet the challenge of the future and do our full part, always, to advance the welfare, the strength and the security of the United States of America.

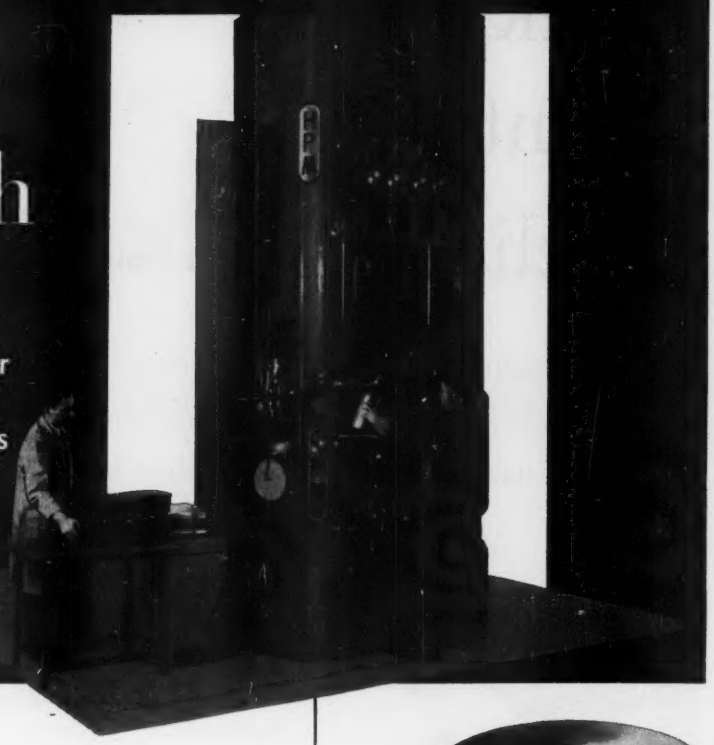
BELL TELEPHONE SYSTEM

Scaife research

develops

stronger, lighter

pressure vessels



The pressure vessels and deep-drawn shapes being made today in the Scaife factory are *better* because of scientific research in Scaife Laboratories. For example, the development of the new Scaife Dura-Lite LP-Gas Cylinder included a complete study of the deep-drawing process, using half-size parts made on the research department press shown above. This procedure, supplemented by complete metallurgical, physical, chemical and specialized studies, permits accurate evaluation of various materials, drawing methods and processing procedure. The result is a better, more serviceable product designed and made on sound engineering principles.

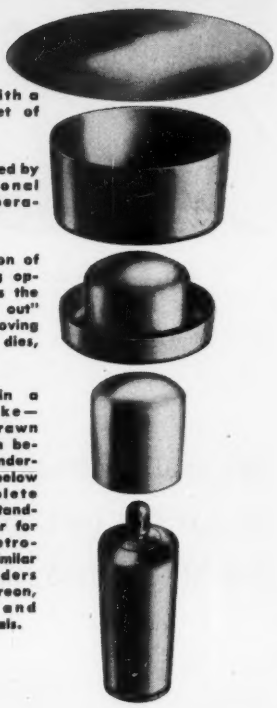
SCAIFE COMPANY

OAKMONT (Pittsburgh District), PENNA.

Makers of Pressure Vessels for Air, Gases and Liquids

FOUNDED 1902

Here is the "big brother" of the press shown at the top of the page. Full-size cylinder-half has been formed in one stroke of the press (see right) and is being removed for processing and assembly.

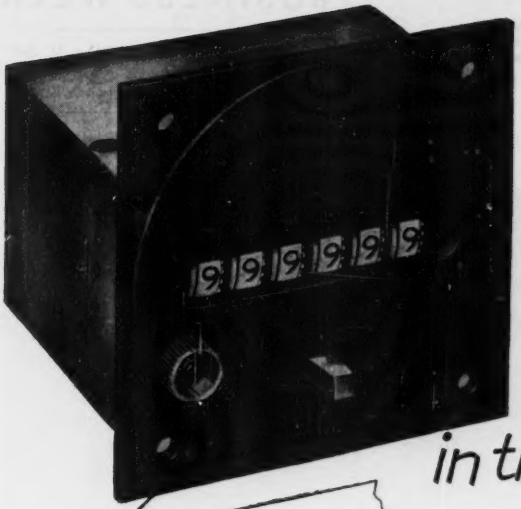


Starting with a circular sheet of steel—

a cup is formed by a conventional drawing operation.

A continuation of this pressing operation turns the cup "inside out" without removing it from the dies,

completing—in a single stroke—the deep-drawn shape, which becomes a cylinder-half. Shown below is the complete cylinder, a standard container for liquefied petroleum gas. Similar Scaife cylinders are used for freon, acetylene and other materials.



...and here's a Counter that talks to Jet-Testers in their own language...

Added Evidence that—

Everyone Can Count on VEEDER-ROOT

This technician is reading an electrically operated counter, used to record data in test instruments that check aircraft performance.

And this counter is one of innumerable Veeder-Root specials now on duty in every arm of the service. If you can use such counters (or need counters of special design) on D-O—rated orders, then you can count on Veeder-Root to help you with all possible dispatch.

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....WIRE WITH Belden

AND CUT COSTS

Cut Costs—start with the right wire—a wire that is engineered for your product—for internal assemblies—for power supply cords.

Cut Costs—in lower installation costs—in less production line waste and fewer rejections upon inspection. Prevent failure in service—insure customer good will.

Cut Costs—specify Belden Wire. Our engineers can demonstrate these advantages of "wiring right." Investigate, today.

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Belden WIREMAKER FOR INDUSTRY

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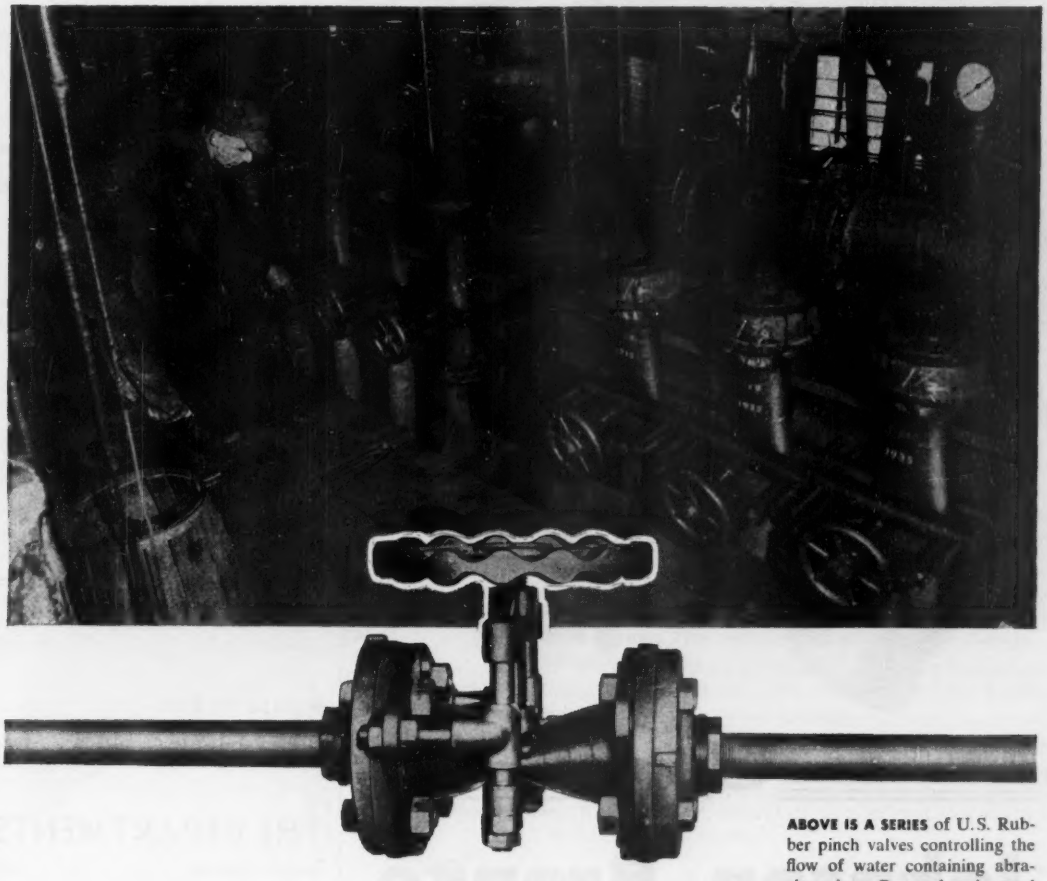
What does U. S. Rubber's pinch valve do for the coal industry?



ABOVE IS A SERIES of U.S. Rubber pinch valves controlling the flow of water containing abrasives in a Pennsylvania coal preparation plant. Many of them have been in continuous operation for over 16 years. Below the photo is the newest of the U.S. family of pinch valves, shown in a closed position. Sizes range from 1½ inches to 8 inches.

The new "U.S." pinch valve outwears metal when installed in pipe lines carrying abrasive or corrosive mixtures. Its flexibility offsets misalignment in pipes, absorbs vibration, breaks up galvanic action in pipes, eliminates "water hammer" and offers a positive seal in a closed position. The metal parts of the valve can be refitted to new valve bodies, thereby reducing replacement costs.

These valves are also available in neoprene for oil resistance, butyl rubber for high heat and severe acid conditions, and pure gum stock for food and beverage conveyance. Extremely compact design. Write to address below.

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UNITED STATES RUBBER COMPANY

MECHANICAL GOODS DIVISION • ROCKEFELLER CENTER, NEW YORK 20, N. Y.

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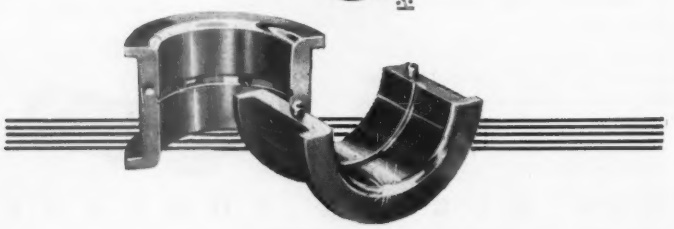

In BUSINESS this WEEK . . .

• Not Enough Minerals

Domestic output is falling way short of meeting defense needs. What the new minerals agency plans to do about it. P. 24

• From Bean Storage to Tanks

The remarkable conversion of a surplus aircraft plant to tank production—in just 12 months. P. 42

• How's Your Pay?

You can get an idea of how it stacks up by seeing what's happened to executive salaries over the last 10 years. P. 54

• Cost Cutting Is a Mess . . .

. . . for most department stores. But there's gradually getting to be some science to it. P. 90

• "We Want Flood Insurance"

That's the cry that's gone up from Kansas City flood victims. It may shake the insurance companies into writing a policy for it. P. 106

• Hope for Iran

The breakoff of oil talks hasn't completely slammed the door—yet. P. 125

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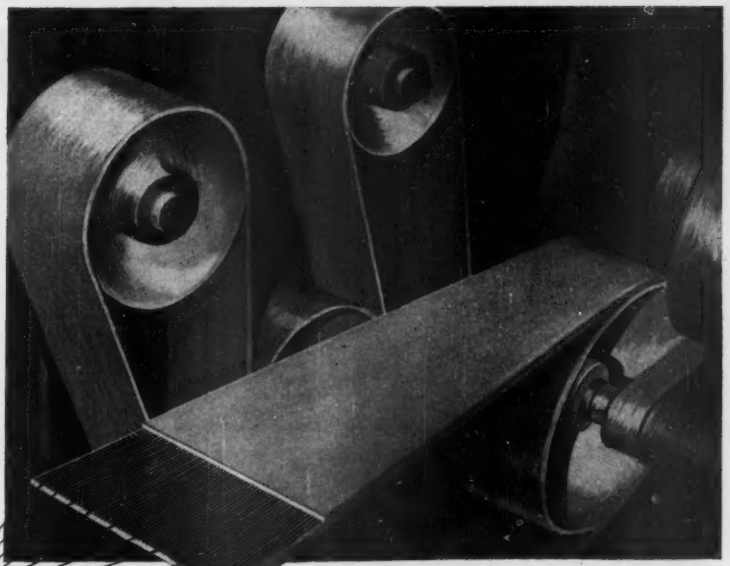

HORSEPOWER HARNESS—Leather has a natural firm grip on pulleys that protects against slippage and power waste—until it begins to stretch. To prevent stretching, thin cords of "Cordura" rayon are placed between laminations of leather in this belt. As a result, it has the natural "hold" of leather . . . plus the stretch-free strength of "Cordura" rayon.

This Du Pont yarn takes the s-t-r-e-t-c-h out of leather belting

To get leathery grip *without* leather's stretch, they're now reinforcing leather belts with Du Pont Cordura* High Tenacity Rayon. It builds in stretch resistance for uninterrupted service . . . strength for overloads.

Yarns of this Du Pont industrial rayon are inherently stronger than yarns of natural fibers. They are made in continuous filaments with no short ends to pull apart under stress. They virtually eliminate stretch and slippage.

And since the number of fibers and the diameter of each fiber are precisely controlled, there are no weak spots in "Cordura" yarn. It makes belts uniformly strong and less subject to fatigue.

You may be able to put the extra strength of this Du Pont heavy-duty yarn to work, improving your product or process . . . without increasing cost. Perhaps it will even suggest a new product. We'll be glad to work with you. Address: Rayon Division, Room 4421, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.

REG. U. S. PAT. OFF.

Du Pont "Cordura" High Tenacity Rayon

STRENGTH AT LOW COST

SEND FOR FREE BOOKLET "*Sinews for Industry.*" It gives physical properties of "Cordura" and tells how Du Pont will help you. Address: Rayon Division, Room 4421, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.

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. . . THROUGH CHEMISTRY

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ORLON* acrylic fiber
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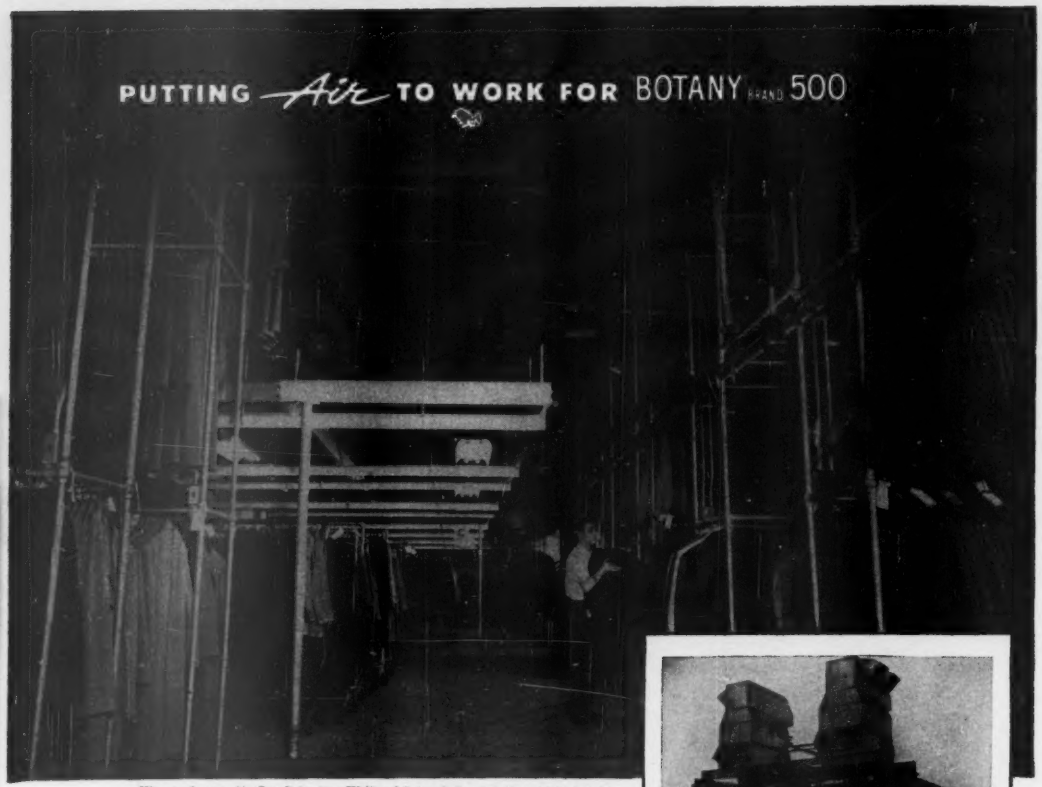
for fibers today . . . for fibers to come . . . look to Du Pont

PUTTING *Air* TO WORK FOR BOTANY BRAND 500



Westinghouse Air Conditioning: Williard Sales & Service, Inc., Philadelphia
Consulting Engineers: Cronheim & Weger, Philadelphia

TAILORED AIR

SMOOTHES THE WRINKLES OUT OF SUIT SALES

Dampness from final pressing stays in coats and suits like water in a sponge. Ten-to-one, a suit shipped damp will arrive looking as wrinkled as last week's wash. But 20,000 "Botany Brand 500" men's garments, tailored each week by H. Daroff & Sons, go out in good shape—will be crisp and sales-room fresh when they arrive.

Westinghouse Air Conditioning does the trick by *putting air to work* in this 90,000 garment storage room. Air is kept at 76° and 45% humidity to pull dampness out of suits in six hours—keep them in press and ready to ship any time. And dirt, dust and grime are locked out behind closed doors and windows throughout the year.

Westinghouse equipment can *put air to work* for you, too—with air conditioning, air cleaning or air handling. Call the Westinghouse Air Conditioning Distributor listed in the Yellow Pages, or write Westinghouse Electric Corp., Air Conditioning Division, Hyde Park, Boston 36, Mass.

Westinghouse Type EVA Evaporative Condensers provide savings up to 95% in water consumption.

Westinghouse Hermetically-Sealed Compressors—unmatched for their vibrationless, quiet operation.

Overhead, out-of-the-way Air Handling Units heat and cool Daroff executive and accounting offices.

YOU CAN BE SURE...IF IT'S

Westinghouse

J-80232

BUSINESS OUTLOOK

A BUSINESS WEEK SERVICE

Factory employment this summer hasn't reached so high a level as had been expected. Slack sales in consumer goods held hiring down.

Moreover, government controls forced some lines, such as autos, to cut more than they otherwise might have. In view of all this, it is perhaps surprising that layoffs haven't risen more than they have.

But the worst of the shutdowns should now be behind us.

•

More plants will be looking for hands later this year.

The rising tide of military output will be the big factor. However, demand for consumer goods is sure to pick up some.

Meanwhile, factory employment is around 15.8-million. That is little higher than at the start of the year and down a bit since spring.

•

Employment in soft goods factories, as might be expected, has held down the totals. It is down about 150,000 from the turn of the year and is only about 100,000 over a year ago.

In hard goods, where munitions loom up, the record is better. Employment is up 650,000 over a year ago—but has risen little this year.

•

Layoffs in July and early August sent initial claims for unemployment compensation zooming. But that trend seems to have changed.

This would appear fairly easy to explain. Workers who were laid off—with no notion when they would be recalled—played safe and applied for compensation. But many were back at work before payments started.

Thus compensated unemployment, at last report, was under 1-million.

•

July's Federal Reserve Board production index, at 213 (down about 10 points from earlier months this year), probably overstates the dip.

Vacations are the distorting factor. Plantwide and industrywide vacations have become more and more common in recent years. It's hard for the statisticians to keep up with this in smoothing out seasonal trends.

The same may be true to a lesser degree of August, too, which the FRB says probably showed only a moderate rise over the July level.

•

Heat and humidity probably are to blame as much as anything for steel operations dipping a shade below 100% of rated capacity now.

Summer always is a tough time in work as hot as steelmaking. There is a natural output dip in years when demand isn't bursting all bounds.

But this summer demand shows no sign of slackening.

Actually, steel like many industries is experiencing a batch of small wildcat strikes. Grievances are magnified as the heat rises.

•

Truck production is the strongest thing now about the auto industry.

Trucks are being rolled out at a rate that bids fair to equal last year's 1.3-million units.

But the tide may be about to turn. Military demand for trucks will remain high—but a lot of dealers complain of a glut in civilian models.

•

Production rates for new passenger cars show unusual changes from week to week. Material shortages and unbalanced inventories are a major factor, of course. But autos are suffering from their share of strikes.

Loss of only a few days' copper output will be a severe blow to users of the red metal.

Both producers and consumers of copper have been on a hand-to-mouth basis right along. The recent refinery strike in Utah tightened supplies further. And each day of an industrywide shutdown costs 2,500 tons.

And remember the loss of byproduct metals—including lead and zinc.

•

Demand for lead and zinc is just about as avid as for other leading metals. That's why users are asking Washington to release lead and zinc from the stockpile—a precedent set recently in copper.

•

Lumber is feeling the effects of reduced homebuilding more than many other building materials. Or, put another way, the big jump in industrial building doesn't require lumber so much as it does steel.

•

Either way, demand is slack and prices soft on such items as millwork and oak flooring, to name a few.

Stocks of a lot of things—doors, doorframes, windowframes, etc.—were built up before curbs on homebuilding began to bite. And new factories are a poor sales prospect; they'll be looking for metal, not wood.

•

Lumber mills are eating into unfilled orders fairly rapidly. More than that, they have built stocks well above year-ago levels.

Production continues to run about as high as in 1950. New orders, on the other hand, have fallen substantially behind last year.

And, even though shipments have been exceeding new orders booked, they are under production. That adds directly to mills' stocks.

•

Next week's cotton crop report is awaited with keen interest.

Textile people, bedeviled by the low level of cotton goods (page 21), hope last month's 17¼-million-bale estimate may be pared just a little. That, they figure, might relieve price pressure the least bit.

And you'll find estimators on both sides of the fence:

(1) Recent rains have broken the drought in northern Texas. But most of the state still suffers with bolls opening prematurely.

(2) Dry, warm weather over much of the remainder of the Cotton Belt is holding down weevil activity and speeding picking.

•

Lower machine tool shipments in July are misleading. Vacations were the cause, and a good pickup is expected from now on.

July's shipments stood at 144.7% of the 1945-47 average in the National Machine Tool Builders Assn. index. June's rate was 182.8%.

Meanwhile, unfilled orders pile up. They are nearly 28 times as high as the rate of shipments in July.

•

Inflation may not be with us again, but the wherewithal to start its spiral most certainly is piling up.

Money held by individuals and business in the form of cash and bank deposits rose to $176-billion in July. The latest monthly gain was a whopping $1.8-billion; that's just under last December's peak.

Government spending accounted for almost all of the increase—and will continue to pump up the money supply as long as deficits persist.

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Thomas A Edison Cuts Costs in Half with SPEED NUTS®

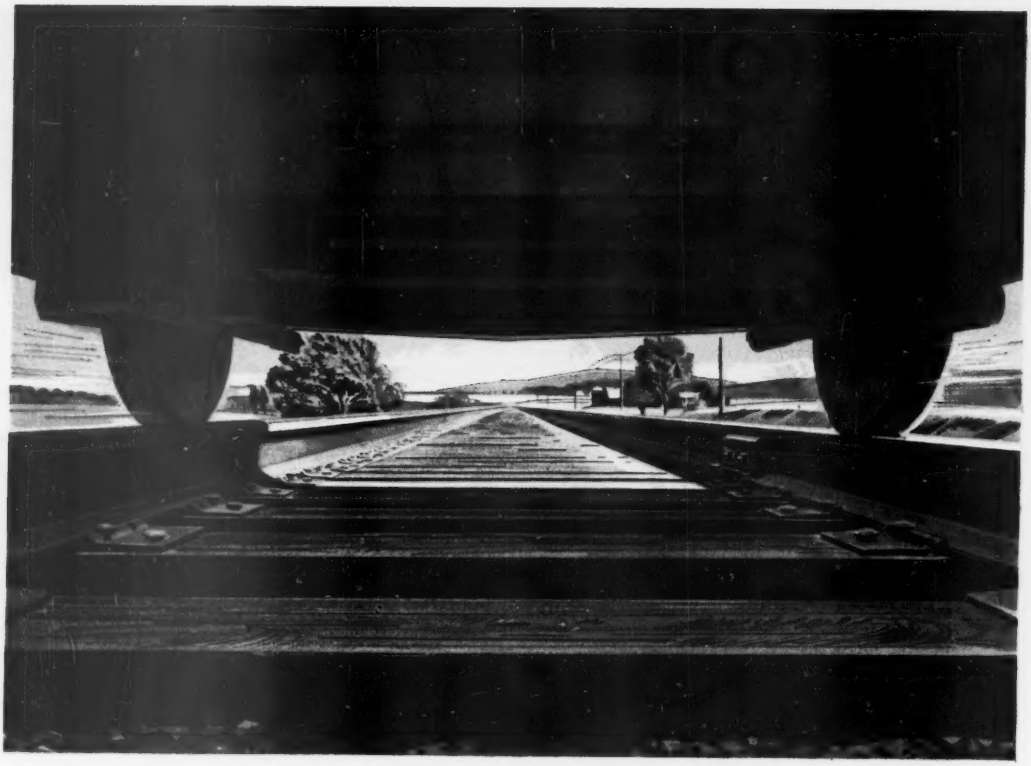
Edison specifies SPEED NUTS after cost comparisons reveal 50% savings over other militarily acceptable fastening methods.

In the very earliest design stages of their aircraft fire detection relay panel, engineers of Thomas A. Edison, Incorporated, checked various methods of attaching connectors to the panel.

Their requirements were rigid. The fastening means had to be light in weight, resist vibration loosening, provide quick and easy assembly, and be in line on cost. Tinnerman Aircraft Connector Mounting Rings proved to be the only fastener that qualified on all counts. Connectors are quickly inserted through these mounting rings and the panel.

As for cost, Tinnerman SPEED NUTS *turned in the finest record by far! Easily 50% assembly savings over acceptable military substitute fasteners were provided by faster, easier, better* SPEED NUTS. Complex or simple, solving fastening problems is Tinnerman's specialty. New booklet, "A Story of Quality", reveals how we can help you. Write for your copy. TINNERMAN PRODUCTS, INC., Dept. 12, Box 6688, Cleveland 1, Ohio. *In Canada:* Dominion Fasteners Ltd., Hamilton. *In Great Britain:* Simmonds Aerocessories, Ltd., Treforest, Wales.

EDISON
Cut-away view of Edison Fire Detection Relay Panel, left, shows two SPEED NUT Connector Mounting Rings in position. "U" Type SPEED NUTS, self-retained on 4 corners of ring, line up with screws driven from outside panel. Detail drawing, below, is close-up of assembly.
TINNERMAN Speed Nuts



One of the Greatest "*Proving Grounds*" is 400,000 miles long . . . and 4' 8½" wide!

When it comes to "service tests," the roughest, ruggedest of all are applied to new equipment for American railroads. Every mile of track is part of a mammoth proving ground. Tests are measured in years, and graded in hundreds of thousands of miles of failure-free operation. There's never been a time, during the past 83 years, when some item of Westinghouse Air Brake equipment wasn't being tested on this proving ground.

A lot of this new equipment you may never see. Such things as the Westinghouse Pneumatic Slack Adjuster, that automatically compensates for shoe wear of freight-car brake rigging, eliminating costly, time-consuming manual adjustment . . . the new D-24-B Feed Valve, that maintains brake pipe pressures to hair-line accuracy . . . the Westinghouse DECELOSTAT,® that eases and immediately restores brake pressure if wheel slip threatens, producing maximum deceleration for any rail condition . . . the Westinghouse speed governor control and load compensating brake equipment, that proportion braking pressures to speed and to car weight, respectively. Every item manufactured by Westinghouse Air Brake Company is designed to help the railroads in their never-ending program of constantly improving your transportation service. And every item is continuing evidence of how the Westinghouse research and development program has contributed to railroad progress.

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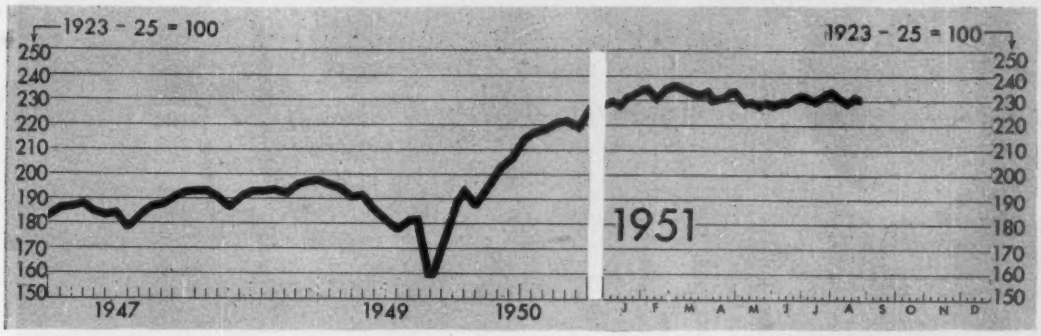
FIGURES OF THE WEEK



	§ Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Business Week Index (above)	*231.7	†232.7	235.0	216.8	173.1
PRODUCTION					
Steel ingot production (thousands of tons)	1,995	2,007	2,029	1,873	1,281
Production of automobiles and trucks	139,115	†129,661	131,598	179,042	62,830
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	$36,589	$37,014	$53,981	$40,226	$17,083
Electric power output (millions of kilowatt-hours)	7,077	7,164	7,005	6,346	4,238
Crude oil and condensate production (daily av., thousands of bbls.)	6,220	6,241	6,205	5,699	4,751
Bituminous coal production (daily average, thousands of tons)	1,715	1,696	1,713	1,884	1,745
TRADE					
Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	77	75	73	81	82
Carloadings: all other (daily av., thousands of cars)	62	60	61	61	53
Department store sales (change from same week of preceding year)	−5%	−8%	−23%	+12%	+30%
Business failures (Dun and Bradstreet, number)	130	158	184	176	217
PRICES					
Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	457.1	457.8	465.3	469.7	311.9
Industrial raw materials, daily index (U.S. BLS, Aug., 1939 = 100)	304.4	304.0	313.5	296.0	198.8
Domestic farm products, daily index (U.S. BLS, Aug., 1939 = 100)	351.0	353.3	354.1	359.1	274.7
Finished steel composite (Iron Age, lb.)	4.131¢	4.131¢	4.131¢	3.837¢	2.686¢
Scrap steel composite (Iron Age, ton)	$43.00	$43.00	$43.00	$40.92	$20.27
Copper (electrolytic, Connecticut Valley; lb.)	24.500¢	24.500¢	24.500¢	22.521¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	$2.33	$2.33	$2.31	$2.19	$1.97
Cotton, daily price (middling, ten designated markets, lb.)	34.81¢	34.95¢	36.49¢	38.61¢	30.56¢
Wool tops (Boston, lb.)	$2.65	$2.65	#	$2.85	$1.51
FINANCE					
90 stocks, price index (Standard & Poor's)	182.0	181.6	178.7	147.4	135.7
Medium grade corporate bond yield (Baa issues, Moody's)	3.49%	3.50%	3.51%	3.22%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	2¼–2½%	2¼–2½%	2¼–2½%	1¼–1½%	¾–1%
BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	50,295	49,909	50,535	48,561	††45,210
Total loans and investments, reporting member banks	70,331	70,305	70,114	68,176	††71,147
Commercial and agricultural loans, reporting member banks	19,503	19,379	18,946	14,512	††9,221
U. S. gov't and guaranteed obligations held, reporting member banks	30,983	30,949	30,949	34,894	††49,200
Total federal reserve credit outstanding	24,175	24,360	24,063	18,883	23,883

MONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year Ago	1946 Average
Wholesale prices (U. S. BLS, 1926 = 100)	July	$179.5	$181.8	$161.5	$121.1
Retail sales (seasonally adjusted, in millions)	July	$11,870	$11.910	$12.700	$8.358

*Preliminary, week ended Aug. 25. ††Estimate (BW—Jul.12'47,p16). #Insufficient trading to establish a price. † Revised. § Date for "Latest Week" on each service on request

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Where dependability is vital, you'll find Exide Batteries.

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WASHINGTON OUTLOOK

WASHINGTON BUREAU
SEPT. 1, 1951

A BUSINESS WEEK SERVICE

Sixth-round wage raise of nearly 7% is forecast privately by Eric Johnston's stabilizing crew. They base that on expected price trends and what's known of union intentions.

Basic rates will push up about 5%, the experts calculate. That's because of the government policy tying wage controls to living-cost rises.

Then there will be fringe benefits, such as more liberal vacations, improvements in pension, health, and welfare funds. These will add another percent or two, for the sixth-round total of about 7%.

•

Steel is expected to set the pattern, with a new Jan. 1 contract. There is a chance, though, that the steel settlement will come at an earlier date. Murray of the CIO and the steel companies may decide to reopen the contracts before they have to.

The key is living costs and what happens to them in the months ahead. The original wage formula permitted wage boosts to offset living costs from January, 1950, to January, 1951, the freeze date. The new formula is merely an extension of this policy and allows wages to go up enough to offset higher living costs since January of the year. Here's how the experts calculate the sixth-round prospect:

The BLS living-cost index in January was 181.5. That was the cutoff date under the old wage formula, which allowed raises of 10% to offset living cost rises from January of the previous year.

The index now is 185.5, up 2% since January (page 36).

The forecast for December is 190, or roughly 5% above January, 1951. That, of course, is based on living-cost expectations. And it makes no allowance for fringe benefits. The stabilizers still are trying to decide policy on them, but they are "guessed" to add 1% to 2%.

•

The food price trend still is up, but only a moderate rise is expected between now and yearend. Here's how OPS rates prospects:

Bread prices will rise, from one-to-five cents. The big reason is labor costs. Bakers are switching from a six- to a five-day week.

Milk, now at ceilings, will be allowed to rise a cent or so more. And where you have local marketing agreements, OPS can't control.

Butter will hold steady. Margarine competition now is very strong.

Eggs, except for the usual seasonal changes, will hold pretty steady. They compete with meat, and no meat shortage is foreseen.

Beef will hold at or near ceilings, with the up-pressure centered on the high grades. Low-grade beef must compete with pork, pricewise.

Pork prices will ease off a bit this fall, under pressure of heavy marketings from the record hog crop that is starting to move.

Poultry production is up, both chickens and turkeys. Prices may rise a little with demand, but chances are they will stay under ceilings.

•

Consumer rationing is nowhere in sight. Food and clothing are ample. Real scarcities, if they do come short of war, will show first in durable goods, such as autos and appliances. Washington will be slow to ration even these. For no one relishes the responsibility of saying who gets an auto.

WASHINGTON BUREAU
SEPT. 1, 1951

Installment sales are slow, despite relaxation of Regulation W. So some merchants are cutting corners to push home appliances.

Trade-ins in lieu of cash down, without an actual trade-in made, are one gimmick. Letting customers use an allowed 15% price cut as a down payment is another.

The Federal Reserve Board may prosecute. It has asked its lawyers to rule on what kind of case can be made. Penalties could include jail and fines, although the board might be content to revoke licenses for credit sales.

•

Lower down payments on homes under $12,000 voted by House and Senate generally are regarded as a stimulant for home construction and sales. But take this relaxation of Regulation X with caution.

The real control may not be credit, but curbs on materials use. All the talk is that housing starts will pick up and will run very high next year, maybe over 1-million. The big hitch is this:

Limitations on housing hardware using steel, copper, or aluminum, the three CMP metals, will permit only 850,000 homes next year.

•

There'll be no letup in investigations. Republicans are pushing to dig deeper into the Truman regime, and there are enough anti-Truman Democrats to keep the inquiries rolling into '52. Chairman Boyle of the Democratic National Committee will have to explain reports that he has pressured RFC. Some party men think he has overstayed his job.

•

Eisenhower keeps quiet, while others speculate on what he'll do. Latest gossip, from a general just back from Europe, is that "Ike" doesn't want the Democratic nomination and doesn't think he can get the GOP nod because of Taft and MacArthur opposition (page 22).

Taft is just being coy when he says he hasn't made up his mind on '52. His short political swings are to see how delegates stack up.

Dewey isn't out of the picture. He's for Eisenhower, as first pick. But if "Ike" drops out, some anti-Dewey Republicans say, Dewey may throw his own hat in for a third try.

•

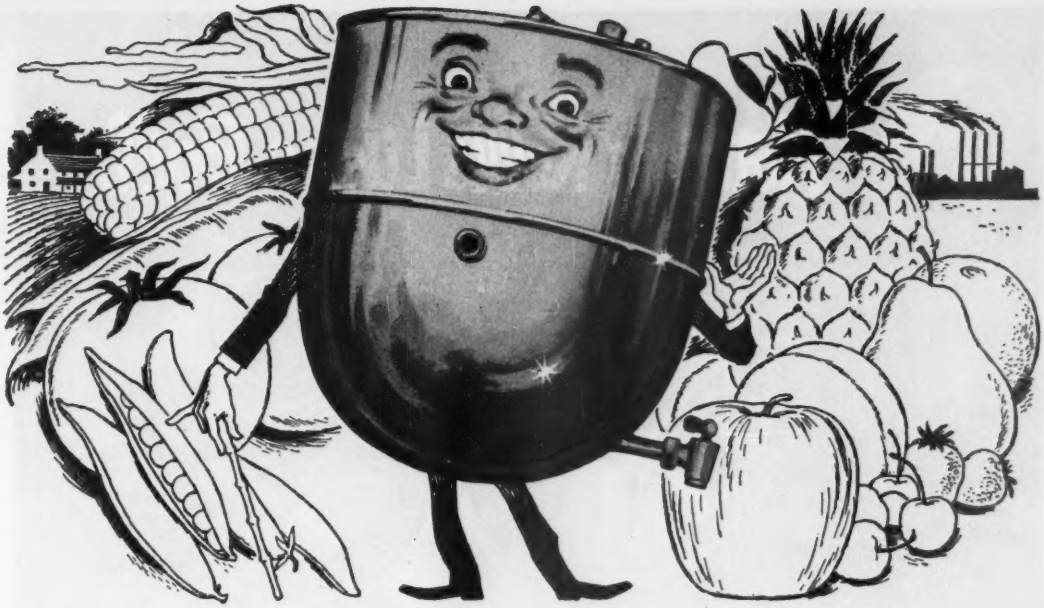
Truman is in for trouble in the South. Plans are quietly afoot to see to it that Truman runs into a second Democratic ticket next year. There's better planning now than in '48. Byrd of Va. and Byrnes of S. C. are most mentioned to head a Southern ticket.

So keep an eye on the South. It, more than the East or Midwest, may decide who wins in '52. One thing is sure: A bitter fight is coming.

•

We are pressing Russia harder all the time. The West flatly refused to give in at the Paris talks on Germany. It's the same story in Korea. And it will be repeated at the San Francisco conference on the Jap treaty. It's tough diplomacy, backed by rearmament of the West.

It runs a risk of war, challenges Russia to reveal her intentions. But Washington sees the alternative as a return to the sort of appeasement that played into Russia's hand in the early postwar years.



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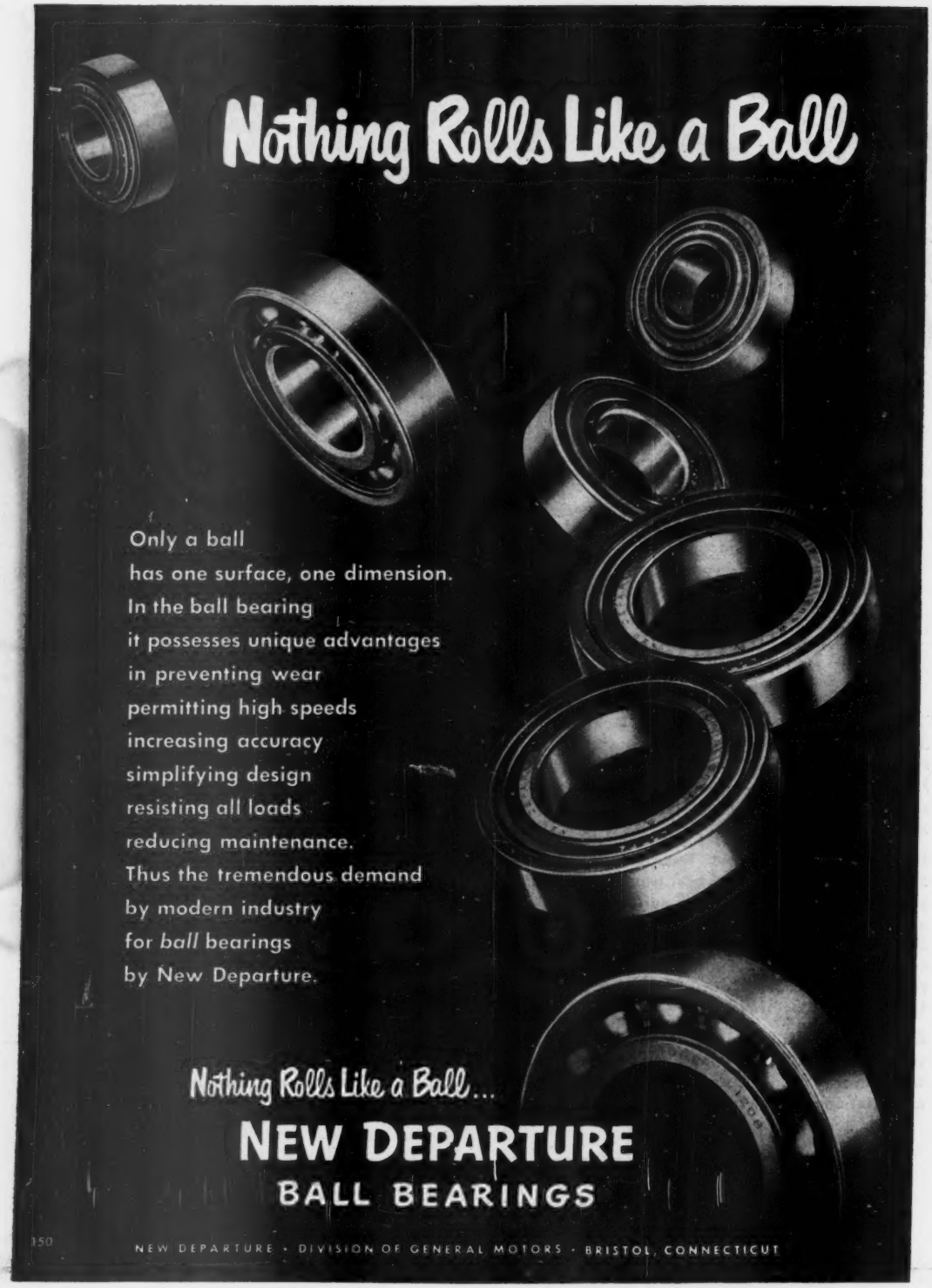
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BUSINESS WEEK

NUMBER 1148

SEPTEMBER 1, 1951

SUPPOSE YOU'RE MARRIED AND HAVE TWO CHILDREN:

If you make this much...	...You now pay out this much in taxes...	...The House has voted to raise your taxes to...	...But the Senate bill is shaping up like this:
$3,000	$120	$135	*$133*
5,000	520	585	*577*
8,000	1,152	1,296	*1,279*
10,000	1,592	1,791	*1,767*
15,000	2,900	3,263	*3,219*
20,000	4,464	5,022	*4,955*
25,000	6,268	7,052	*6,957*
50,000	18,884	21,245	*20,961*
100,000	51,912	58,401	*55,567*
500,000	402,456	432,027	*410,067*
1,000,000	857,456	900,000	*868,667*

Taxes—Pattern for the Next Two Years

You can now figure out within a comparatively narrow range just what taxes you will have to pay in the next two years.

• The upper limit has been set by the new tax bill that the House approved last June (BW—Jun.23'51,p24). It would hike the total U.S. tax load by $7.2-billion a year.

• The lower limit is the bill now shaping up in the Senate Finance Committee. It would increase the tax bite only $5.5-billion.

• **Easier Version**—The final bill that goes to President Truman will be a compromise. But it will be a good deal closer to the Senate version than to the House draft.

The final bill will be easier on individuals in every tax bracket than the House bill would have been. It will be a shade easier on small corporations. And it won't tighten up the excess profits tax drastically—a crucial point for business.

Whatever the provisions of the final bill are, they will stick for at least two years. Congress has no idea of reopening the perilous subject of taxes in 1952, an election year.

• **Balanced Budget**—The chances are that the new tax law will add something like $6-billion to the federal government's take in a full year of operation.

In the fiscal year that ends June, 1952, the yield won't be more than $5-billion because the new rates won't be in effect for the full year.

This sum is a long way short of the $16.5-billion asked by the President back in January. It is only about half the $10-billion to which he scaled his request two months ago.

But the $5-billion in extra taxes still is likely to be enough to keep the Treasury on a pay-as-you-go basis all through fiscal 1952.

• **Income and Outgo**—Levies on the books now are good for close to $62-billion in the fiscal year—although this isn't the official estimate of either the Treasury or the congressional Joint Committee on Internal Revenue. Their guesses range from $58.5-billion to a little over $60-billion.

The official figures haven't taken into account all the income increases that are now expected as a result of defense-stimulated economic activity. Truman's economic advisers look for national income to hit a rate of $265-billion to $270-billion a year by June; in revenue, this means upwards of $62-billion for the government.

Spending, on the other hand, will be edging toward a total of around $67-billion by the end of the fiscal year. Back in January Truman thought it would hit $71.6-billion. But bottlenecks and revisions of military programs have cut the official figure to $68.4-billion. And congressional economy will trim a billion and a half dollars off that.

Put revenue and spending side by side, and you get the balance.

• **Deficits Coming**—This solvency will probably be short-lived. Come fiscal 1953, when military spending alone will hit a peak rate of $72-billion a year,

the Treasury will be forced deep into the red.

There will be no new taxes levied to keep on pay-as-you-go. Leaders of both the Republican and Democratic parties have agreed to keep taxes off the election-year congressional calendar; indeed, unless something like an all-out war comes along, this year's bill is supposed to be the last increase.

Here's what the Senate Finance Committee has voted on individual and corporate taxes. Action on excises is still going on; but, when those figures are added, the excise totals in the bills of both houses won't be too far apart.

I. Individual Income Taxes

Back in February, when the Treasury first presented its revenue proposals to Congress, Secretary Snyder asked for taxes to raise $3.6-billion more from individual incomes. This was to be the first instalment on a two-package program; Secretary Snyder expected to ask for another billion or two at a later date.

The House said nothing doing. When its bill reached the Senate Finance Committee, it provided for only $2.8-billion from individuals. And now the finance committee has trimmed this still further—to slightly over $2.4-billion.

• **Trick Formula**—At first, the committee planned to use a somewhat novel formula to assess this extra load. It wanted to apply new rates to surtax net income after taxes—that is, to income after all federal taxes were deducted. But a little arithmetic showed that such a levy would make the hike on certain middle income groups greater than the House's version. So the scheme was quickly ditched.

Instead, the Senate committee worked out alternative methods, each open to the taxpayer at his option:

(1) The taxpayer can figure his taxes on the basis of the present law and then simply add 11% to them.

(2) He can figure his taxes and then add 8% of take-home pay—that is, surtax net income after deductions and exemptions.

Taxpayers with incomes up to around $50,000 will find that the first method is cheaper. The take-home angle isn't important until the greater part of his income is already going into taxes.

The ceiling rate—the top bite the Treasury is permitted to take from any income—would be upped one percentage point—to 88%. The house wanted to raise it to 90%.

II. Corporate Income

Secretary Snyder had also asked Congress to squeeze another $3.1-billion out of corporations. He suggested an eight-percentage-point increase in the regular corporate income tax, which is now 47%.

The House was willing to meet him more than halfway; it voted a five-point boost to bring in around $2.3-billion. The normal rate on all income would go from 25% to 30%; the surtax on income above $25,000 would stay where it is: 22%.

In general, the Senate committee is going along with the House proposals. It, too, has voted a 52% maximum. But it has split up the five-point hike a little differently: Only two percentage points go to the normal tax while three are added to the surtax rate. The effect is slight; the difference for a corporation with an income of $5,000 is only $150; for those with incomes of $25,000 or more, the difference is merely $750.

• **Other Changes**—Senate Finance decided to leave the excess profits tax as it is: A 30% surtax on 85% of income in excess of that earned during the best three years in the 1946-49 base period. The House had voted to drop the 85% exemption to 75%.

In addition, the Senate Finance Committee:

• Endorsed the House's boost in the maximum tax load on a corporation's income from 67% to 70%.

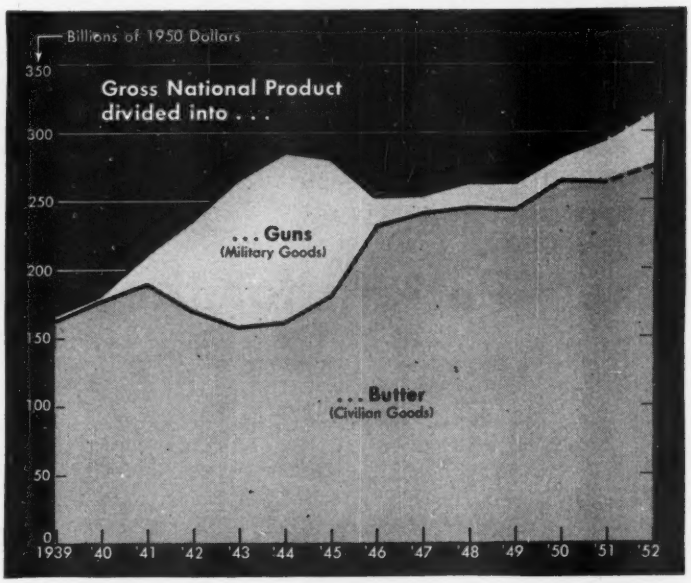
• Set Dec. 31, 1953, as the termination date for the corporate tax increases.

• Voted to put individual income taxes into effect and start withholding on Nov. 1.

• Granted heads-of-households one-fourth the benefits available to married couples under income-splitting—instead of one-half, as voted by the House.

• Struck out the increase in the long-term capital-gains tax voted by the House; the levy stays at a 25% top, instead of 28.125%.

• Struck out the House-approved provision for withholding on dividends, interest, and royalties, but retained the provision requiring reporting of interest on amounts over $100.



Output Rise Matches Military Program

The chart above shows why the U. S. consumer hasn't yet felt any real squeeze from the steadily rising military program. It compares the civilian share of production—in terms of constant 1950 dollars—with the military's take.

In this comparison, two things stand out:

• This time, as just before World War II, industry is filling the expanded military program out of increased production instead of cutting down the civilian share.

• Military programs, including capital expansion earmarked for defense, are still only one-quarter of what they were when we were geared up to the peak of World War II. Even though the arms load now adds up to $33-billion, it is only 12% of the country's total output of goods and services.

Textiles Show Signs of Life

Industry believes slump is ending, especially in cotton goods. Picture is less bright for rayons and wools. But with prices near rock bottom, buyers should reenter market soon.

Once you hit the bottom there's no way to go but up.

This week, for the first time since spring, the textile industry is pretty certain it has reached the bottom of the second deepest recession since the end of World War II.

• **Confined**—This worst-is-over feeling is a lot stronger in cotton goods than it is in either rayon or wool. In rayon, for instance, yarn producers like American Bemberg are still slashing output because of slow demand and big inventories. Weaving mills in the South are described as "drastically curtailing." Rayon cloth prices since March are off 20% or more.

In woolens and worsteds only government orders are holding up production. And mills are running through those. The worsted industry in New England is working short weeks, as few as four days. Though worsted mills would ordinarily open their lines for the spring season in late July and August, only a few have done so. Those that have are quoting prices well below last season's. The rest are waiting to see what happens to raw wool in the Australian auctions, which opened this week at prices 5% to 15% lower than in June.

• **Cotton Hopes**—Even in cotton goods, no one was saying flatly that the end of the doldrums has arrived. But there are enough signs around to give those in the trade reason to be hopeful.

One of them is raw cotton itself: The price is close to the government support level of 32¢. That means it can't go much lower, so there is no reason for buyers to hold off any longer.

This situation has already produced a couple of encouraging signs. A short while ago, Worth Street's cotton print cloth market had its first real flurry of buying in months. On Aug. 16 about 12-million yd. were sold, a lot of it going to big mail order houses and converters. Prices were about half a cent higher than mills had been asking.

Since then, activity has slacked off. But observers figure big buyers have become convinced that cotton textiles, at least, have dropped about as far as they are going to.

• **Prolonged Drop**—It was a long descent. Earlier this year, 80-square print cloth—bellwether of the cotton textile trade—was selling for 29½¢ a yd. The spring and summer slump pushed prices close to pre-Korean levels of around 19¢.

Overproduction, a letup in government buying, and a bumper crop of new cotton get the blame for the middle-of-boom recession.

Output of cotton cloth during the last half of 1950 and the first half of 1951 hit record proportions. Korean scare buying by consumers pulled the rest of the trade into the market for long-term deliveries at high prices. Raw cotton, on the strength of last year's short crop, soared to 45¢ a lb.

• **Blowup**—That bubble burst in the second quarter. Consumers went on their January-February buying spree. Then new orders dribbled off to nothing as the trade got wind of a big cotton harvest this fall. Retail inventories piled up, too. They are just now being worked down to normal (BW—Aug.25 '51,p26).

As a result, raw cotton prices fell sharply (from 45¢ to about 35¢ a lb.). As they fell, so did mill orders.

Beginning with the July vacations, mills cut back production drastically. This week they were still on short time, many working only three days a week. A lot of the work being turned out is part of the big backlog built up during the post-Korean buying spree.

• **Waiting Period**—Even with a bigger batch of new orders, it will probably be late this year before any new business placed by converters brings a revival to the idling fabric weavers. No one expects much of an upturn at the mill level before October. Many think it will be later than that. There was even some question whether the recent Worth Street move was the actual turning point.

About the only thing that seems certain is this: Unless the international picture changes, there will be no runaway market to match last year, either for raw cotton or fabrics. Right now, 29¢ print cloth looks as remote as 19¢ cloth looked late last year.

That feeling runs through all types of textiles. Mill men aren't complaining about big inventories themselves, but they are wondering what has become of the record output that started in July, 1950. As things stand, capacity production just doesn't seem to be in the cards.

And curtailment of output is likely to continue well into the winter.

• **How Bad?**—All this raises the question: How bad has the textile recession been?

Bad enough, say the mills. But hardly a one will chalk up 1951 as a poor year. It was nothing like the 1948-49 slump. Profit figures for many are substantially higher than a year ago, although the average will be below 1950 because of higher taxes and low second-half volume. But total sales volume probably will top a year ago.

Government work and big backlogs kept most mill cutbacks within reasonable bounds. Cotton consumption, for example, held at a high rate right through July.

Converters—who bridge the gap between gray goods and the cutters—have been the hardest hit. Their credit has been stretched; many have been asking mills to hold off deliveries at contract prices far above current levels.

• **Manpower**—Regionally, New England right now is suffering more than the South. Rhode Island, for instance, is a manpower surplus area, one of the few in the country. Employment there is at the lowest level since September, 1949. Most of the layoffs have been in textiles.

New Price Setup A Hit at Preview

Price stabilizer Mike DiSalle previewed the latest thing in price orders this week. His audience—a representative group of manufacturers—liked it better than anything they had seen to date.

Ceiling Price Regulation 22X, as the draft has been tentatively dubbed, is a modified version of the General Manufacturers' Order; the changes are supposed to make the old CPR-22 conform to requirements of the Capehart amendment to the new Defense Production Act.

• **Terms**—CPR-22, originally issued late in April, permitted manufacturers to add factory labor and material cost increases through mid-March to pre-Korean prices, in computing ceilings; increases in advertising, selling, and overhead expenses were not allowed. The order set the pattern for a half-dozen specially tailored regulations.

The revised regulation takes into account cost changes—direct and indirect—up to July 26 and permits inclusion of all cost changes under the ceilings. When perfected and finally issued sometime next month, it will be followed by a series of orders that similarly raise ceilings on other manufactured goods.

• **Cost Allocation**—The Office of Price Stabilization has spent the month since the new act was signed working out a method for the allocation of overhead cost increases among items in a line. It has come up with a general formula that takes care of the necessary computations of manufacturers who do not have elaborate cost-accounting systems.

STRATEGY: Too many chiefs, not enough Indians are Republican problem.

ORGANIZATION: New office for GOP replaces quarters it's had since the '30s.

DRUM-BEATING: Democrats at Midwest meeting at French Lick watched waiter . . .

WITH 1952 COMING UP—

Politicos Start Moves to Make Next

Across the country, the politicians are now buckling down to the serious business of getting their man named as candidate for President.

A year ahead of the party conventions that will select the two contenders, the professionals now feel they can measure fairly well what's going on—something they wouldn't talk much about even a couple of months ago.

Generally, they agree that the best guess for the moment is Taft vs. Truman. The hard advance work put in by Taft backers all around the country, they say, has given Mr. Republican more strings—and stronger strings—on more convention strength than any other candidate, as of now. For this and other reasons, Taft is definitely out front.

For Truman, last week's meeting of Midwest party officials showed new backing among the rank-and-file of the organization. And Truman is putting on a performance, they say, that will become the new model for future Presidents who want to be renominated.

I. Republican Race

On the Republican side, Taft's position as front-runner still leaves room for just about anything to happen. Taft's lines to the party workhorses all over the nation are what impress the professionals. His lieutenants have fences built and in good repair in all sections—Midwest, West, New England, and the South. Down through U.S. history this kind of quiet preparation has paid off more often than not with a nomination.

But Taft's hold on the convention delegates is in marked contrast with the senator's rating by the voters. There he's way behind the most potent name on the Republican side: Gen. Eisenhower.

Of course, no one is positive Ike is a Republican. But the Republicans—both pro and con Ike—are operating completely on the premise that if he admits to any party label it has to be Republican.

• **Poker Hand**—But they also agree that, so far, Ike has not tipped his hand. The junketing senators a few weeks back created a new crop of rumors on this critical point—and each week there are apt to be new stories circulating, supposedly coming straight from Ike himself. For instance, this week a tale going the rounds quotes Ike as (1) hinting plainly that he is not interested in the Democratic nomination, and (2) stating flatly that he "didn't think he could get the Republican nomination" because of the opposition of Taft and Gen. MacArthur.

The professionals claim that Ike can hold out a long while yet—and still pluck the Republican nomination with ease. They do agree, though, that he will have to come out for the nomination. There's no such animal as a real simon-pure draft of a man who has not plainly said he wanted to run.

Eisenhower can hold off until March, when a series of state Presidential primaries begin. Or he could—if he chooses—hold off until convention time, if that seemed the smart thing to do.

• **Another Willkie?**—Taft men don't like this latter prospect at all. They remember Willkie's whirlwind seizure of the nomination in 1940, a complete victory of the late-coming amateurs over the old-time pros.

Some of the pros concede that there's much in the political climate now that reminds them of 1940. There's mobilization and talk of war, and the undercurrent of yearning of the Republicans for a dream candidate with the stuff to put them into power.

• **Taft's Chances**—If Ike chooses not to run, that would leave Taft the front-runner. The senator has twice been out in front at convention time, and on the

. . . do balancing act, thought it symbolic. Party bigwigs say Truman is gaining again.

President

record, he has the disadvantage of having twice been a loser.

Under such circumstances, you would see the strong undercurrent of yearning for a new, fresh, appealing face, a 1952 Willkie. Whether one is available is another question.

The midwesterners and conservatives have already shown they might be interested in pushing forward such prospects as Sen. Everett Dirksen, of Illinois.

Along with Dirksen, of course, there is a whole raft of possibilities—governors like Warren of California or almost any Republican senator you care to name. Gov. Dewey has no illusions about his own chances, but he might assume the lead in a stop-Taft movement.

II. The Democrats

Truman's stock is rising, and, despite his generally poor showing in the polls, the professionals are becoming convinced that Truman will run again and that his chances of reelection look better.

• **Odds-on Choice**—It's admitted, of course, that Truman's stock with the public rises and falls in sharp ups and downs—and that lately, it's been mostly down. But top Democrats who specialize in car-to-the-ground assessment of sentiment claim Truman has made a real recovery.

Partly, this could be attributed to dwindling chances for any conceivable set of circumstances by which Truman might be pushed aside. But there's also the impact of Truman's campaign in '48—something that the politicians of both parties just can't ignore. On this point, it's agreed that history doesn't repeat itself, but it's also agreed that history shows that Truman is a tough opponent when the chips are down.

There are no signs that Truman is building up a successor. Certainly Illinois' Sen. Douglas, the liveliest prospect on the Democratic side, will get no assistance from the Fair Deal organization.

The nearest thing to an heir-apparent is Chief Justice Vinson, whose prospects have been favorably assessed lately by such liberal (and knowledgeable) columnists as Doris Fleeson and Tom Stokes.

III. The Long View

So right now, it looks like Taft vs. Truman. But there's almost a full year of maneuvering ahead, with some Presidential preference primaries approximately six months off. Actually, as the nomination conventions get under way, all bets are off, and the throat-cutting begins.

A Taft vs. Truman campaign could fall flat, although the strong Taft bloc contends that such a contest would be the first time since the Presidential election of 1936 when the voter would have a real choice.

Nevertheless the things Truman might say of Taft and the Republicans, and that Taft might say of Truman and the Democrats, have all been said. The campaign might well be more of the same.

• **New Flint**—An Eisenhower vs. Truman campaign, on the other hand, generates another prospect: Truman's people, though the President himself would probably not be a partner to it, would talk about militarism, about Eisenhower's lack of a political record, about his being a completely unknown quantity who doesn't know what his politics are.

And the glitter of five stars might well be tarnished by the time this country has gone through another year of regimentation for rearmament—particularly if the world climate were less warlike than now.

But Eisenhower would be a personality, fresh and new. Against this Truman would have to carry into battle the scars of 20 years of Democratic rule, including not a few nasty ones of recent months.

Copper Slowup

Strike cuts output, as union stands on mediators' recommendation. A week's lost time will dent arms program.

Washington's biggest production problem at midweek was copper: Practically none was being mined in the U.S.

A strike led by the left-wing Mine, Mill & Smelter Workers Union (BW—Aug.25'51,p34) had shut off 95% of the nation's vital copper production, as well as most lead and zinc output.

The nationwide nonferrous mining strike was hardly unexpected. For almost a month, Mine-Mill had trumpeted its coming. Its original deadline, Aug. 20, was postponed a week for the announced purpose of giving federal mediators time to help the union and Kennecott find agreement on a new contract. The Kennecott negotiations were expected to set a pattern for the rest of the industry.

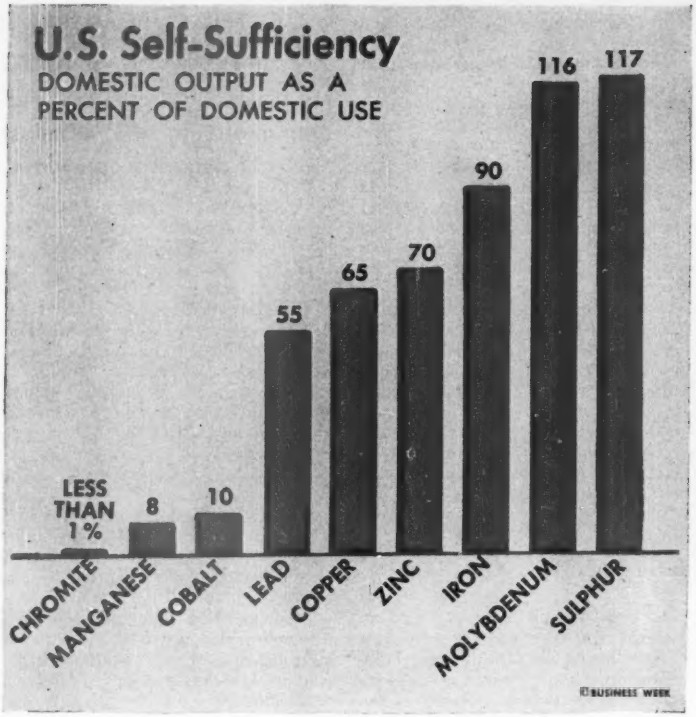
• **Mediators Nod**—The union's bedrock demands added up to a 20½¢-an-hour wage increase. They included 4½¢ per working hour for pensions, 7¢ for job reclassifications, and 9¢ for a general wage boost. Kennecott found these demands too steep.

In an effort to break a deadlock, the federal mediators made what now appears to be a serious mistake. They "recommended" that Kennecott accept the 20½¢ figure. That was all the union needed.

When Kennecott refused to give in, the union struck. When President Truman asked for a return to work, the union said it wouldn't go back until the government induced Kennecott to accept the mediators' recommendation. It repeated this stand when Truman referred the dispute to the Wage Stabilization Board, and again when George Taylor, board chairman, asked for a return to work pending hearings.

• **Consequences**—Maladroit handling of the whole dispute was making a tough situation even tougher. It should have been evident to everyone concerned that Mine-Mill, with a Communist-oriented leadership, was going to be unmoved by appeals in the name of national defense. It might, however, have been affected by public opinion, had it not been given a chance to take a respectable position behind the recommendations of federal mediators.

A week of lost copper production would seriously dent the arms program. Everyone hoped that George Taylor would work a miracle. If not, the only effective tactic might be for the President to seize the mines.



Minerals: Imports Needed

To plug growing gap between domestic production and consumption, U. S. will have to expand foreign sources. Jess Larson, as boss of new agency, is charged with the job.

Jess Larson got his orders this week as mobilization's top man for metals. As head of the new Defense Materials Procurement Agency, he's supposed to jack up minerals expansion until it matches the expansion of the rest of the economy.

He got a tip on how to do it, too—by stressing expansion abroad.

For a man as wise around Washington as Larson, this made plain what DMPA's policy must be. He will turn more and more to foreign sources, while he keeps domestic mining doing its best to increase production.

• **Truman Order**—The size of Larson's job was staked out in an order by President Truman establishing DMPA. The new agency inherits the production-expansion duties formerly held by Defense Minerals Administration and the procurement responsibilities formerly held by General Services Administration. Larson, who has been boss of GSA, will now quit that job.

The policy Larson will have to follow has been spelled out in a report from the Bureau of Mines (chart). In part, it shows that out of 38 minerals important to war U. S. output is falling steadily behind consumption in 25. This list includes iron ore, copper, bauxite, zinc, lead, tungsten, mercury, manganese, chromite, and nickel.

• **Long Process**—Decline in self-sufficiency in minerals set in a generation ago, gathered speed in World War II, and since Korea, has moved faster than ever. The expansion tricks, which have started the U. S. economy racing toward a 25% over-all growth, failed to work with minerals.

Take quick amortization: Out of $8.8-billion worth of expansion approved for fast tax writeoff only 2% has been for nonferrous metals. This has been due partly to confused authority, which Larson's appointment is supposed to clarify. But it is due also to the unpleasant fact that big expansion possibilities for such key metals as copper, lead, and zinc are relatively few in the United States.

Copper is currently the most important limiting factor in U. S. production—even aside from the present strike (page 23). It is the metal that the mobilizers want most to increase. Yet only five copper projects, totaling $21-million, have been approved for quick amortization. Four small zinc projects have been approved, and two projects for lead.

• **Purchase**—Government purchase contracts are another device that has been available. There has been none for copper, though. Two good-sized contracts have been hung up for months in Larson's old agency, GSA. Nothing important is in the works for zinc or lead.

Two general purchase programs are getting started, one for tungsten and one for manganese. The idea is to use government price guarantees to get small U. S. mines to step up production. They will draw in a lot of small producers—but not much tonnage. The Manganese Producers Association, for example, estimates it will bring in only 2% of our needs.

The government has put $5-million on the line to stimulate exploration for minerals and has another $5-million ready. But results are a gamble, and are slow to be turned into actual production.

The big find under a similar program in World War II was the San Manuel copper deposit in Arizona, which still has not produced a single pound of metal.

• **Loans**—Also, there are government loans. DMPA probably will use them more than its predecessor, DMA. The order establishing DMPA names RFC as the loaning agency for domestic expansion.

The Export-Import Bank will be Larson's loaning agency abroad, matching the domestic function of RFC. Export-Import has already asked for $1-billion additional lending authority, part of it for expansion of minerals production.

Subsidies are another device Larson can use. He can pay out money in almost any way he sees fit to increase production. He'll be urged to act quickly to buy at over-ceiling prices and resell to U. S. consumers at the ceiling.

For the first six months of 1951, the decline in imports of refined copper was 57,000 tons, of refined lead 120,000 tons, and slab zinc 29,000 tons. That was due to ability of fabricators abroad to pay more than Office of Price Stabilization ceilings.

One of Larson's first jobs will be to sell skeptical congressmen who already doubt that he has enough authority to do the job. If they also decide he is slighting U. S. mining, Larson may well wish he had his old job back as head of GSA.

No Yankee Mill

New England has all but given up hope of getting its steel mill. Cost-and-market survey reports killed it.

Back in January, the $250-million integrated steel mill at New London seemed so real to New Englanders that they could almost touch it (BW–Jan. 13'51,p23). This week it appears certain that the mill will never be built.

• **A Good Start**–New England has been trying to get a steel mill for many years. And early last year it began to look as if results were just around the corner.

The New England Council's steel committee had determined to its own satisfaction that raw material costs would be competitive and that a market existed for the products of such a mill. A New England Steel Development Corp. was set up to take the ball from the council committee and to handle the job of "promoting, determining the location of, and financing" the mill. It started negotiating with a couple of major steel companies, trying to get one of them to build and operate the project. And it hired a New York engineering concern, Coverdale & Colpitts, to make an impartial survey of probable costs and prospective markets.

• **Just About Set**–On Jan. 11, 1951, the government awarded the mill a $250-million certificate of necessity, permitting rapid writeoff of the investment. Clifford Strike, president of F. H. McGraw & Co. and head of the development corporation, announced that the financing was just about set.

Things had never looked so rosy; all that was needed was someone to undertake actual construction and operation.

Setting up a new, independent steel company to do it wouldn't work: The tax-amortization certificate would be no help in early, low-profit years unless the operating company had income from other sources against which to write off the depreciation. So an existing steel company would have to take over.

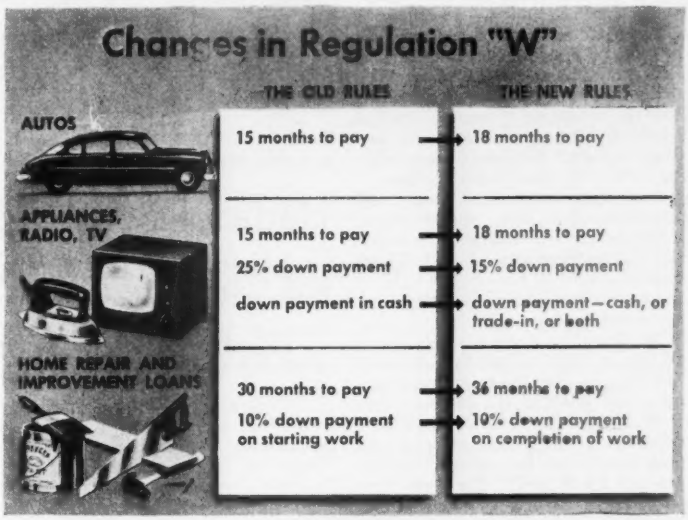
That didn't seem too big an obstacle to Strike and his associates. Bethlehem Steel had secretly taken an option on the mill back in November; its final decision was to be based on the C&C report. And Strike and the New England Council, thinking back to the figures developed by the council's steel committee, were pretty sure the report would be favorable.

• **Hope Dims**–The first blow fell in March. C&C released its report; it wasn't favorable. Bethlehem dropped its option (BW–Mar.17'51,p24). The council and the development corporation found that the report's cost estimates were much higher than their own and its estimates of the market potential much lower. C&C agreed to look into the matter again. The revised April report was more favorable, but not much.

So the council hired H. A. Brassert & Co., well-known steel industry consulting engineers, to "review and analyze" the C&C data. Brassert found that C&C had been "overly conservative" in its estimates of costs, markets, and potential profits. New England's hopes perked up again.

• **Lost Cause**–But last week the final blow fell. C&C submitted another report rebutting the Brassert findings in considerable detail. That did it. It's almost inconceivable now that any existing steel company would undertake the project in the face of C&C's repeated unfavorable estimates.

Strike himself admits publicly that "the outlook is most grim." Translated, that means that even he has just about given up hope.


Changes in Regulation "W"
THE OLD RULES
THE NEW RULES
AUTOS
15 months to pay
18 months to pay
APPLIANCES, RADIO, TV
15 months to pay
18 months to pay
25% down payment
15% down payment
down payment in cash
down payment—cash, or trade-in, or both
HOME REPAIR AND IMPROVEMENT LOANS
30 months to pay
36 months to pay
10% down payment on starting work
10% down payment on completion of work

Easier Credits, Few Takers

Relaxed Regulation W controls start no buying spree. But they have brought some new customers in used cars and appliances. New-car buyers still hold back.

Ever since sales started to slip last spring, retailers all over the U.S. have been crying out against government controls on consumer credit. Regulation W, they gasped, has put too great a squeeze on them; credit restrictions, particularly on appliances and automobiles, have all but killed sales dead.

The sales drop was enough to convince Congress. When it renewed the Defense Production Act, it ordered the Federal Reserve Board to relax consumer credit. So as of July 31, a somewhat modified Regulation W went into effect (chart, above).

• **How Much Rise?**–Last week BUSINESS WEEK surveyed retailers throughout the country to find out just how much of a spur this had put into buying. The story varies widely from section to section, and even among dealers within one area. But it all boils down to this: The new regulation has brought no buying spree. In fact, in a number of cases it has had no effect at all.

Sales have taken an impressive jump in some cities, but there generally is a stronger reason than easier credit to explain these spurts. In Birmingham, for example, one store reports that TV set sales have suddenly caught fire; they are up a solid 40% just since the end of July. But the store attributes only a small part of this jump to Reg. W. The main reason is that a second coaxial cable will go into operation in Birmingham on Sept. 17–which gives enough choice of programs to make owning a TV set worth-while.

• **In the Mood**–On the other hand, one Birmingham appliance dealer says

that refrigerator sales top everything else, up perhaps 20%. The same thing applies in many cities throughout the country (though not in all).

Dealers think that the relaxation of credit control has helped this pickup. But the real reason, they say, is that consumers are beginning to get in the mood to spend again. There were signs of that sometime before the relaxation of Regulation W had a chance to take effect (BW–Aug.11'51,p112).

Income statistics have shown that people have been able to spend, but haven't been willing to; they were socking more money than ever away in the mattress. Now they are beginning to dig some of it out of the ticking and head for the stores. By fall retailers hope to feel a lot happier.

• **Spotty Effect**—This doesn't mean that the relaxation of controls has had no effect at all. But no storeman anywhere reported that people were rushing to buy big ticket items on time.

And that's why retailers are still grumbling—they feel, almost unanimously, that the relaxation was too slight to do them any real good. That's especially true in new cars, which, in the nation as a whole, have shown no significant upswing.

• **No Incentive**—Dealers don't blame all this on Reg. W, but they do think that keeping the one-third down payment and boosting the payment time from 15 to 18 months "is just plain ridiculous." The dealers say that anybody who can pay for a car in 18 months can pay for it in 15. The only thing that would help them, they argue, would be to extend the time to at least 21 months, preferably to 24.

By contrast, used-car dealers say there has been a big spurt in sales, perhaps as much as 20%. They think, by and large, that most of the upturn is due to Reg. W.

• **Appliances Better**—Appliances have fared better than cars under the new controls. The reason is that controls on them were relaxed much further.

But a lot of dealers are jittery about this—they think that because people can pay less cash down and turn in old appliances as well, there eventually will be more repossessions.

• **Tie-in Trade**—On the other hand, the fact that dealers are now permitted to take trade-ins has led some of them to swing to the other extreme. Some stores use a sort of "tie-in trade-in," a new switch on the old tie-in sale.

For example: One appliance dealer in Portland, Ore., offers not only "top allowance for your old range or refrigerator," but says he "will give you $25 for your old necktie," as well.

• **Against Intent**—This sort of thing, says FRB, is "against the intent of the regulations." Trying to keep dealers from doing it is another matter.

FAST-TALKING Dudley LeBlanc says he is trading medicine for big-league politics.

Hadacol Sold?

Bayou's gift to the drug trade claims he has a buyer for his patent medicine—a deal for cash plus salary.

Louisiana's rootin'-tootin' medicine man—State Sen. Dudley J. LeBlanc—grabbed the spotlight from his itinerant troupe of entertainers in the Deep South this week to put over two points to the panting press:

(1) He has sold Hadacol, his high-octane elixir, to a group of eastern businessmen.

(2) He wants to be governor of Bayou land.

LeBlanc, ordinarily no shrinking violet, shrank from disclosing all the sordid details of the business transaction. And Wall Streeters, noting his plans for an excursion into upper-case politics, are waiting to see the signatures on the sale papers before they accept it as being official.

• **In Cancer Research**—This much he did say: Among the buyers was the Tobey Maltz Foundation of New York City. And the selling price, he added, was $8-million cash plus $100,000 a year salary for 15 years.

Medical authorities in New York swallowed hard when they learned that the obscure foundation identified itself with cancer research. Would the gullible assume that Hadacol held therapeutic promise for cancer victims? The idea was probably far-fetched, but it made professional men wince.

In the absence of Dr. Maxwell Maltz, the plastic surgeon who heads it, the professional societies in New York were unable to throw any light on the Tobey Maltz Foundation. They had no record of it.

What little light was shed came from the Bureau of Internal Revenue in Washington. In 1948 the bureau had ruled it tax-exempt as a nonprofit organization.

The exemption would not extend, of course, to income of the Hadacol company. Still, the foundation would pay no tax on gifts or dividends received from Hadacol.

• **Capital Gain**—If LeBlanc had indeed sold his gold-plated, diamond-encrusted meal ticket, the tax advantage for him was fairly obvious. Within a decade his $4,000 investment had mushroomed beyond the wildest dreams of avarice, and he could take a capital gain on the fantastic accrual—with a top tax rate of 25%.

BIR, however, might want to take a long look at the $100,000 a year he said the buyers would pay him. The revenuers would want to satisfy themselves that it was bona fide salary, not a device for tax avoidance.

Tire Prices to Go Up After Synthetic Rise

Look for a hike in the price of tires. It's likely to be the first result of this week's approval by the Office of Price Stabilization of a boost in RFC's price on synthetic rubber.

A rise from 24½¢ per lb. to 26¢ on synthetic will add about 15¢ or 16¢ to the cost of a passenger car tire. But that's only one element in Akron's cost analysis. All the big rubber companies have agreed to a pay increase of 13¢ an hour for some 116,000 employees. The Wage Stabilization Board is expected to approve soon.

Together, these production cost increases leave the industry small choice.

• **Materials Cost**—Synthetic rubber had been stabilized at 18½¢ per lb. for a long time. Last December it jumped to 24½¢. The reason was wider use of alcohol butadiene to increase production.

Just about the same reason lies behind the latest hop in price of synthetic. Alcohol butadiene is more expensive than petroleum butadiene. Other raw materials are up, too.

RFC maintains a single price for GR-S, whatever its origin. Made from alcohol, the rubber costs 32¢ to 35¢ per lb.; from petroleum, it's 18¢ to 19¢. RFC averages these out, and, as the proportion of rubber from alcohol (now 22%) rises, the average rises, too.

The new 26¢ price, says RFC, should be enough to cover the higher costs involved in the remaining alcohol butadiene plants that are being demothballed.

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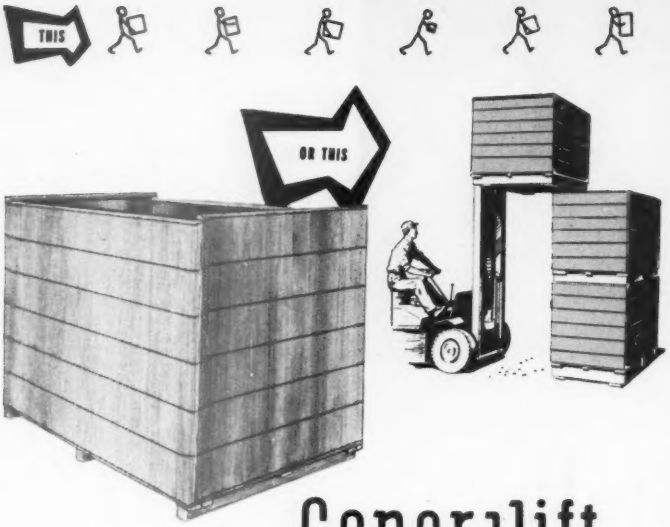

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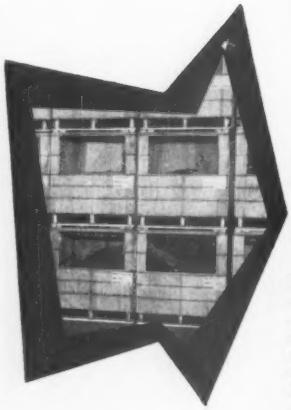

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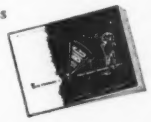

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General BOX COMPANY
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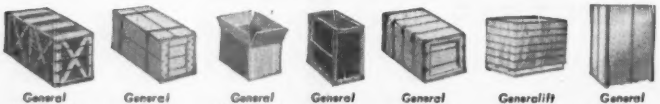

General Wirebound Crate | General Nailed Box | General Corrugated Box | General Cleated Corrugated Container | General All-Round Box | Generalift Pallet and Pallet Box | General Watkins-Type Box

BUSINESS BRIEFS

GE offered its 270,000 employees, union and nonunion, an across-the-board 2½% wage increase, plus a cost-of-living markup. On the average, it amounts to about a nickel an hour. GE has negotiations under way with CIO's Electrical Workers.

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Pittsburgh steel mills this week are operating at only about 98% of capacity. Main reasons: periodic furnace repairs and a tightening of scrap supply.

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The scrap shortage prompted DPA chief Manly Fleischmann to call a meeting of 400 industry leaders in Washington Sept. 11. Fleischmann's aim is to find some way to get obsolete equipment converted into steel scrap.

•

The 10-word telegram is no longer standard measure. In granting Western Union a rate increase of $9.8-million, the Federal Communications Commission said 15 words must be allowed under the new, higher minimum charge.

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Kansas City has made a fast comeback from the mid-July floods. Five weeks after the disaster, every one of the 60 plants in the Fairfax industrial district is back in production.

•

A cargo plane on the lines of the Super Constellation was announced by Lockheed Aircraft Corp. It will fly the continent nonstop at 330 mph. with a 20-ton payload—at a cost of less than 5¢ per ton-mile. The plane can be produced for airlines by 1953, earlier for the armed forces.

•

Dredging of the Delaware River to provide a deepwater channel for U. S. Steel's Tidewater mill was blocked in the Senate by Sen. McMahon. Big Steel had been cold to the proposed integrated steel mill at Waterford, Conn., McMahon's home state (page 25).

•

Full dieselization moved a step closer for the Erie R.R. The line ordered 13 new diesel locomotives at a cost of $1.9-million. It already has 414 diesels hauling 94% of its freight.

•

No-change plane rides between Miami and the West Coast would be possible under an interchange agreement that three airlines have filed with CAB for approval. The three lines – Braniff, Eastern, and Trans World–intend to operate Constellations on the service. The southern crosscountry route via Houston was suggested by CAB in a recent opinion.

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Did you know that the Pittsburgh Coke & Chemical Company now produces plasticizers too? Pittsburgh PX Plasticizers are just one of the groups of basic products we're supplying to the important plastics industry. Many of the coal chemicals which we produce—phenol, cresol, benzene and phthalic anhydride, to name just a few—are vital to the production of plastics, rubber and protective coatings for both peacetime and military production.

When you see the Pittsburgh Coke & Chemical Company name or trademark, remember that they represent a basic, integrated organization supplying industry and agriculture with a wide and diversified family of useful products.

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★ DiButyl Sebacate.....PX-404
★ DilsoOctyl Sebacate.....PX-408
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LABOR

STAFF MEN in research office set up to help industry members of WSB are (l. to r.) William Van Meter, Anthony Alfino, Carroll French. They dig up, analyze facts.

Industry's Wage Data Arsenal

Employer spokesmen on WSB overcome their handicap in lack of research backstopping by setting up group for job of fact-gathering—with help from management.

It didn't take industry members of the Wage Stabilization Board long to see that they were behind the eight-ball. In any give-and-take, public members and labor members had rich resources, vast research facilities. All the three industry members had was what they carried under their hats or stuffed into their pockets.

From the start last winter, public members had access to the fact-gathering, data-interpreting facilities of the Dept. of Labor. Union representatives could call on the competent research departments of AFL, CIO, and a score of their constituent unions.

That void in the arsenal of the industry members led early this summer to the birth of the Employer Wage Stabilization Research Office (BW—May19'51,p15). At the appeal of the industry spokesmen on WSB, the office was set up by the National Assn. of Manufacturers and the U.S. Chamber of Commerce—not to make policy, but solely to provide service.

• **A Handy Tool**—After a couple of months in operation, the EWSRO is proving itself a handy tool in the kit of the six men who speak now for industry on the expanded board.

Physically, EWSRO is far less impressive than its name. It's a single office—Room 538—in the Esso Standard Oil Bldg. in Washington, just a few blocks from WSB. Its full-time staff: One manager, William G. Van Meter, on loan from the chamber, and two secretaries.

Activities of the office are supervised part-time by Carroll E. French, director of NAM's industrial relations division; and William B. Barton, manager of the chamber's labor relations department. Barton's assistant at the chamber, Anthony P. Alfino, has filled in for Barton while he was attending the ILO meetings at Geneva. On occasion Leo Teplow, associate of French at NAM, helps out.

• **Suspicion**—When George T. Brown, executive assistant to the AFL members, heard of EWSRO, he suspected it was a vehicle through which industry would try to "ride herd" on industry members.

Both NAM and the chamber say it isn't so. Major policy decisions have been made, since the advent of EWSRO, that the business organizations have not liked.

For instance when WSB adopted the wage policy that ties wages to the cost of living, industry representatives concurred with the public and labor members in the decision. This week that policy was attacked by an editorial in the NAM News.

• **Individuals**—Nor do the industy members on the board always stick together as a group. When WSB approved a "catch-up" on certain fringe benefits last month, industry member Alexander R. Heron of Crown-Zellerbach Corp. went along with the public-labor majority.

Three other industry members—G. Maynard Smith, Atlanta attorney; M. M. Olander of Owens-Illinois Glass Co.; and George W. Armstrong, Jr., of Texas Steel Co.—dissented.

Two absent members, however, would have sided with Heron if they had been present: Richard P. Doherty of the National Assn. of Broadcasters and Hiram S. Hall of Bigelow-Sanford Carpet Co.

Thus there would have been an even split among the industry representatives on the fringe "catch-up" issue.

Public and labor members, on the other hand, voted as a bloc.

• **Not Instructed**—Industry members subscribe to the position their predecessors took after the labor members walked off the board last February: industry members act on their own judgment, serving the interests of all Americans; they are not "instructed delegates." (Labor members were accused of being "instructed delegates" of the United Labor Policy Committee.)

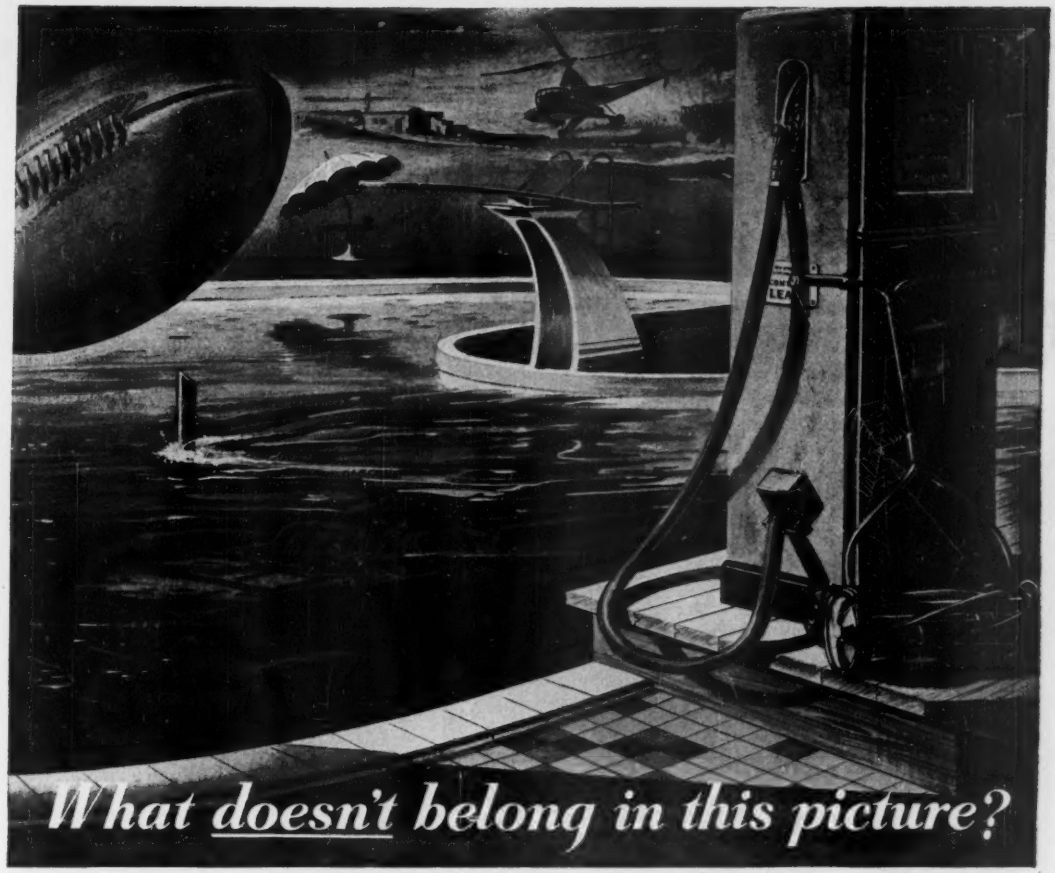
At WSB, the industry members have an executive assistant, Herbert M. Kelley, on leave from Pullman-Standard Car Mfg. Co., Chicago, where he is assistant to the industrial relations director. Kelley runs the industry room staff. If you drop in with a problem, Kelley will see you first. If the industry members need something from the outside, Kelley gets it.

The WSB industry room has two technical assistants. One is John W. Whittlesey, until recently on Barton's staff at the chamber. The other is Mrs. Katherine G. Parsons, from the Pennsylvania Manufacturers Assn.

• **Analysts**—These technical assistants work on cases coming before WSB on which the industry members must vote. They prepare memos analyzing the facts and relating them to the regulations. Sometimes they write drafts of opinions to accompany a decision.

But for general research material on policy questions, the WSB industry members turn to EWSRO.

At the request of WSB's industry



All but one of the objects in this picture have something in common — Norton or Behr-Manning abrasive products are important factors in their manufacture and in their quality. *Can you find the stranger?*

The Submarine Truck? No! True, it's out of place in a swimming pool . . . but hundreds of its parts were produced with the help of Norton grinding wheels and machines and Behr-Manning abrasive products.

The Tile Floor? No! Both the curb and mosaic tiles are Norton floor products . . . unique because they are made non-slip, even when wet, by ALUNDUM abrasive. And, like many other tiles, they were fired in kilns lined with Norton refractories.

The Gasoline in the Pump? No! As it passed through the refinery on its journey from oil well to you, Norton high temperature refractories and catalyst supports were important quality factors.

The Football? No! Many vital operations in the manufacture of leather require Norton and Behr-Manning abrasive products. For instance, drums wound with Behr-Manning coated abrasives condition the grain before coloring – rough the surfaces for secure cementing.

The stranger in the picture is the cobweb. Remember, the manufacture of any man-made product. . . whether of metal, wood, paper, cloth, leather, ceramics, or plastics . . . is dependent upon abrasives, abrasive products, refractories, or grinding machines that bear such well-known trade-marks as Norton and Behr-Manning . . . the world's largest manufacturers of abrasives and abrasive products.

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members, for instance, EWSRO has researched:

- A study of deferred wage increases by industry groups.
- A report on changes in average straight-time hourly earnings by industries.
- Factors involved in tying wages to the consumers' price index.
- Problems involved in exempting from wage controls employees in price-exempt industries.

All of these were pertinent to policy decisions WSB has made or has under consideration.

• **Others on Call**—Little of the work is done by EWSRO itself. It makes use of the research staffs of the NAM and chamber as well as other management organizations. Sometimes this involves only asking the organization for copies of studies already made. Other times, the research office may ask for a special study.

Occasionally, a hurry-up call will go out to some employer who has made a study or has had experience with a particular problem. General Motors, for instance, was tapped for information on its wage escalator.

• **Policy Matters**—EWSRO does not get into specific cases. Nor will it listen to problems of individual employers. It is concerned only with policy questions.

Sometimes WSB industry members want to discuss a problem with key people in industry familiar with it. They contact EWSRO. A call goes out, and in a day or two a session is set up in Washington. Usually, the WSB members will specify the industrialists whose views they would like to get.

Before WSB's cost-of-living policy decision, for instance, EWSRO wanted to discuss—quickly—the impact of allowing living-cost wage increases, what already has been done by employers, whether an automatic tieup of wages and prices is inflationary, what a difference in base date might mean, what alternatives there are.

In two days eight top industrialists were in Washington and discussed these points with the WSB industry members at breakfast.

On three occasions, they have got together at dinner, groups of about 20. At the last one, a few weeks ago, this was the agenda:

(1) Pensions and other benefits.
(2) Improvement factor.
(3) Interplant inequities.

• **Talk It Out**—At these sessions—informal meetings are held between dinners—the men from industry express their views and considerable exchange of opinion takes place. WSB members listen, comment, ask questions. They make no commitments. When they leave, the visitors do not know what the decision will be.

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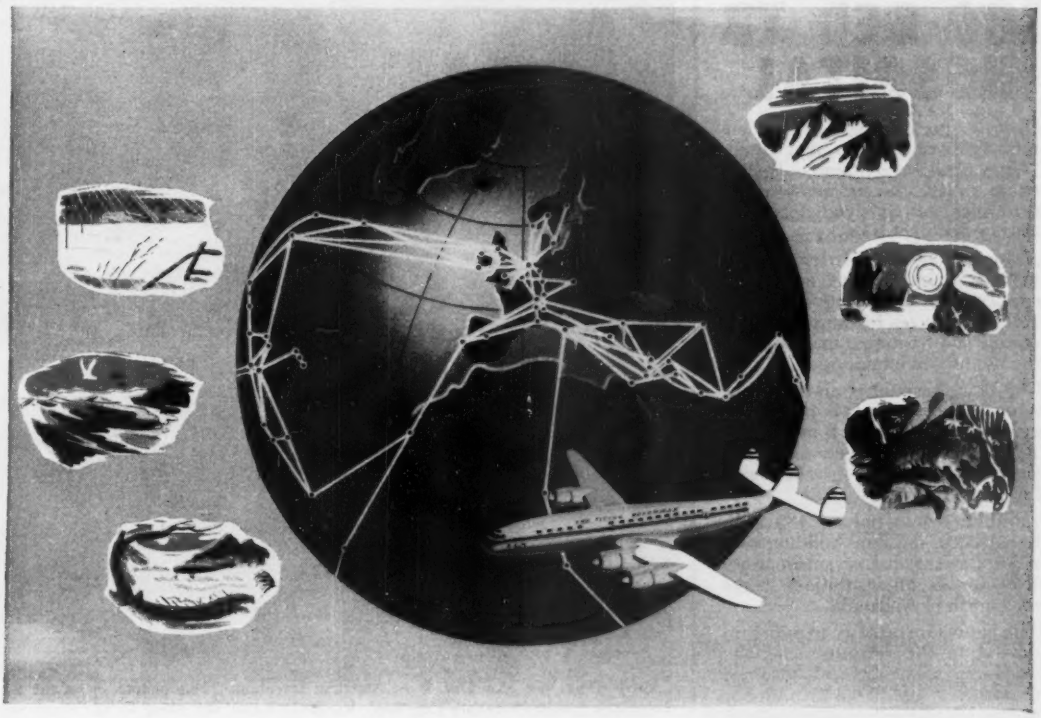

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East Tennessee Tuberculosis Hospital, Knoxville, Tenn. Architects and Engineers: Baumann and Baumann; Will W. Griffin and Shi G. Goodwyne, Associates. Heating Contractors: John F. Humphrey Company, Knoxville. Medical Consultants: Dr. R. H. Hutcheson, Commissioner of Public Health and Secretary of the Tennessee TB Commission, and Dr. W. W. Hubbard, Director of Hospital Service for the State of Tennessee.

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Heating specifications for the new East Tennessee TB Hospital stated: *"There shall be continuous flow of steam to the system with full or fractional heating of radiators at all times when heat is on."*

A 4-zone Webster Moderator System of Steam Heating meets this specification, supplying steam according to need for nursing floors, service and treatment units, operating rooms and laboratories.

The new Hospital is an important unit in the Tennessee plan, conceived by Governor Browning in 1937, to coordinate new and existing state-owned tuberculosis hospitals.

In addition to supplying 180 additional beds, the new building provides for surgical and laboratory work for all TB institutions in the area north of Knoxville.

The new Hospital is proving in operation the soundness of the designers' conception. Want some information on Webster's money saving ideas for hospital heating? Call in the Webster Representative or write us.

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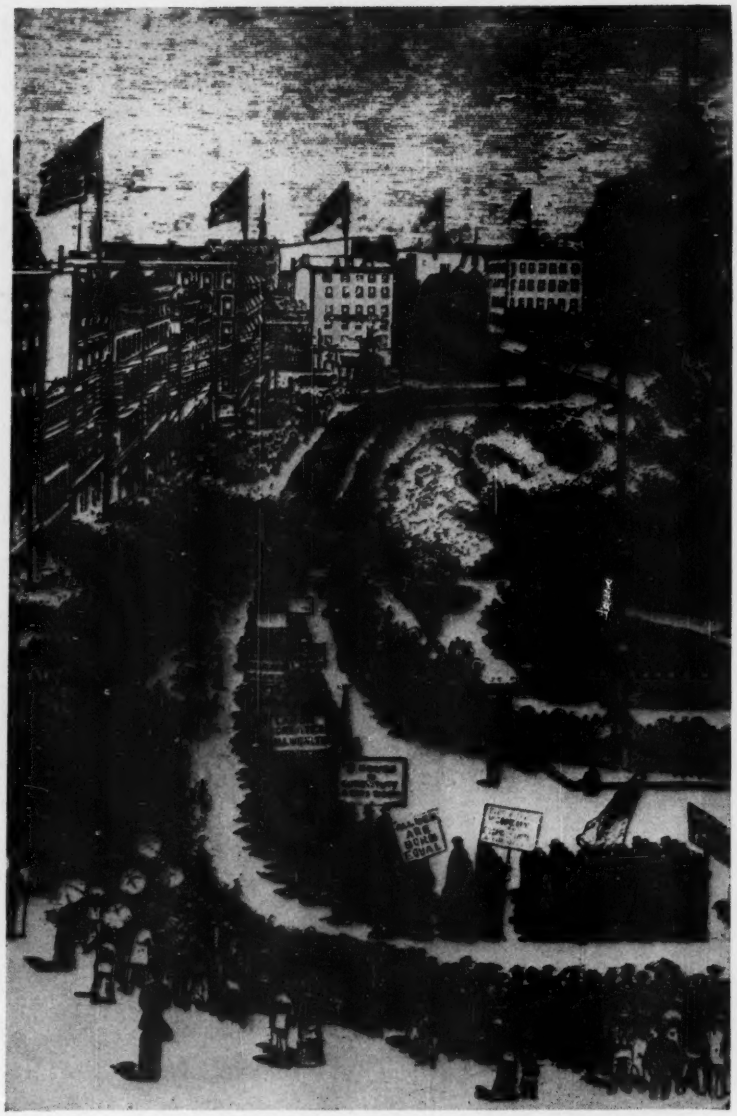


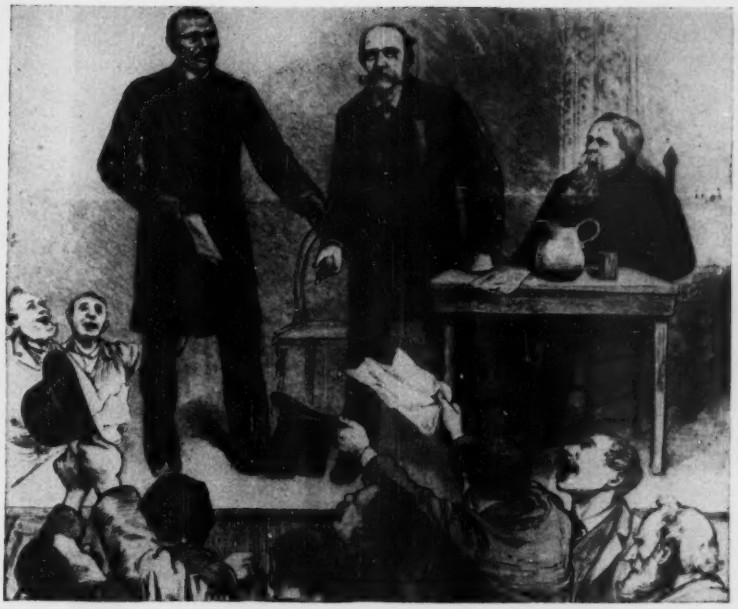
LABOR DAY, like May Day, is an American invention. This picture shows the first Labor Day parade: New York City, Sept. 16, 1882. Labor was asking for the 8-hour day.

Landmarks of U.S. Labor—

Employers, meeting a union for the first time, make a common mistake. It is the assumption that the union has just come into being—or is of very recent origin. Actually, such employers put themselves at a considerable disadvantage by being ignorant of the labor movement's past. For, like other institutions, the modern labor union is to a significant degree shaped and tempered by its history and experience.

• **Recommended Reading**—For the management man who wants to read some labor history, such basic works are available as the four-volume History of Labor in the United States (John R. Commons and Associates). The fourth volume in this set, by Selig Perlman and Philip Taft, is a classic.

Colleges and universities must bear



KNIGHTS OF LABOR were a precursor of the AFL. Here, Terrence V. Powderly, head of the Knights, is being introduced by a Negro delegate at their 1886 convention.

SAM GOMPERS (right), father of the modern American labor movement, chats with a delegate from the British unions in 1894. Gompers was an immigrant from London.

at a Glance

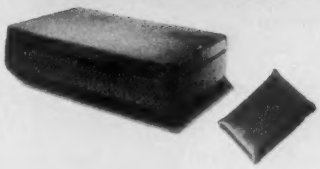
some share of blame for management's frequent lack of awareness. Most of their labor relations courses are strong in technical matters but woefully inadequate in providing historical background. After college the executive has little time for basic reading.

• **Quick Look**—That's why businessmen may find special value in a concise, easy-reading 66-page pamphlet just issued by the Dept. of Labor, entitled Brief History of the American Labor Movement.

The booklet was originally prepared for the State Dept. for use of Labor aides in U. S. embassies abroad. It presents in capsule form, with illustrations (above), the highlights in the history of American labor organizations from 1791 to 1950.

Your congressman can supply you with the pamphlet, or you can purchase it for 25¢ from the Government Printing Office.

Mechanical Handling and Processing are close partners



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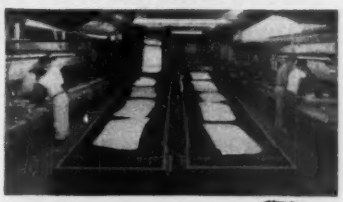

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What's Happening to the Cost of Living

	Total Cost of Living		Food		Clothing		Rent	
	Old	New *	Old	New *	Old	New *	Old	New *
July, 1941	105.3		106.7		104.8		106.1	
July, 1942	117.0		124.6		125.3		108.0	
July, 1943	123.9		139.0		129.1		108.0	
July, 1944	126.1		137.4		138.3		108.2	
July, 1945	129.4		141.7		145.9		108.3	
July, 1946	141.2		165.7		158.7		108.7	
July, 1947	158.4		193.1		184.7		110.0	
July, 1948	173.7		216.8		197.1		117.3	
July, 1949	168.5		201.7		188.5		120.7	
January, 1950	166.9	168.2	196.0	196.0	185.0	185.0	122.6	129.4
July, 1950	172.5	172.0	210.0	208.2	184.7	184.5	124.3	131.3
August	173.0	173.4	209.0	209.9	185.9	185.7	124.6	131.6
September	173.8	174.6	208.5	210.0	190.5	189.8	124.8	131.8
October	174.8	175.6	209.0	210.6	193.4	193.0	125.0	132.0
November	175.6	176.4	209.5	210.8	195.0	194.3	125.4	132.5
December	178.4	178.8	215.4	216.3	196.4	195.5	125.8	132.9
January, 1951	181.6	181.5	221.6	221.9	199.7	198.5	126.0	133.2
February	184.2	183.8	226.0	226.0	203.2	202.0	126.8	134.0
March	184.5	184.5	225.4	226.2	204.6	203.1	127.3	134.7
April	184.5	184.6	224.6	225.7	205.2	203.6	127.7	135.1
May	185.4	185.4	226.7	227.4	205.7	204.0	128.0	135.4
June	185.5	185.2	227.0	226.9	205.5	204.0	128.3	135.7
July, 1951	**185.8**	**185.5**	**227.5**	**227.7**	**204.9**	**203.3**	**128.8**	**136.2**

*BLS has revised its formula for computing the cost-of-living index (BW-Mar. 10, '51, p112). Since the old index is still widely used in labor-management bargaining, BLS will continue issuing both sets of figures at least through 1951.

Data: U. S. Bureau of Labor Statistics.

Index Rise Lifts Wages for Millions

The three-tenths of one point rise in the cost-of-living index in July is just enough to mean an automatic, 1¢-an-hour wage increase on Sept. 1 for workers at General Motors, Ford, and International Harvester. These three were the first major employers to make the announcement, but they're sure to be followed by others who employ a total of around 1-million in auto and auto parts production, and 2-million in electrical manufacturing, transportation, and other industries.

• **Sets Off a Chain Reaction**—And that's not the end of it. A hair-trigger relationship between living costs and wages is now official government policy (BW—Aug.11'51,p21). A rise in the price index means that rates set by negotiation as well as those set by escalator formula will be permitted a higher ceiling. The fractional increase in the last recorded calculation of the index is probably the most significant ever to occur: It means higher wage bills for thousands of employers.

What is happening is deplored in all quarters—though not for the same reasons:

• Walter Reuther, whose escalator contract with GM made the government's "tie-wages-to-prices" policy inevitable, spoke for labor. He said his union would rather see prices go down than get a wage boost because of inflation.

• The Administration took the development with an "I told you so" air. It blamed a balky Congress, which had refused to give it the stringent price control authority it asked.

• Employers weren't sure whom to blame; but they were sure it was awful.

• **Plank for the Platform**—Food and rent were the factors in the index that had moved up enough to raise the total index figure. Clothing prices actually went down, while other components stayed about the same. This is a key to what the political consequences will surely be.

The Administration's drive for stricter controls has emphasized food and rents. And it will continue to do so. That they will be a major issue in the 1952 election campaign is now virtually certain.

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Map courtesy Army Map Service, Corps of Engineers. Sign by Borkland Laboratories, Marion, Indiana.

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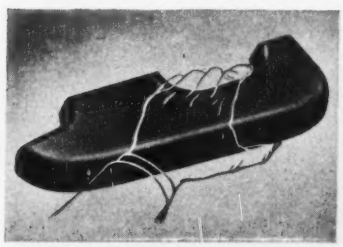
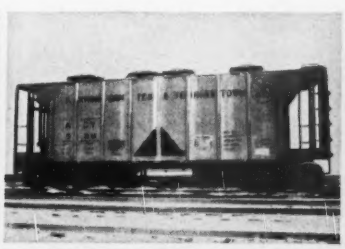


ASSEMBLY TIME CUTTER. Arm rests for Studebakers now assembled in record time. with one-piece VINYLITE Elastomeric shells. Cut production expense. Enhance comfort. By Hungerford Plastics Corp., Murray Hill, N. J. and Industrial Plastics Co., 1829 So. 55th St., Chicago, Ill.



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Alcoa, Tennessee, is the town aluminum built. Your map shows it on Route 73, but it's also on another—the road we built by helping people.

This road is 63 years long. Among the important milestones along it are those that mark the building of Alcoa plants and facilities in 37 counties, in 17 states. Some, like the mills at Alcoa, or the world's most modern aluminum rolling mill at Davenport, Iowa, are large in their communities. Others are located in the industrial forests in big cities. But all these plants we built along our road are good neighbors.

We try to go more than halfway to make them good places for the citizens of those communities to work. A major responsibility that the plant manager at each one enjoys most is his active part in community affairs. These plants along our road pay an important share of community taxes, and participate in worthy local projects.

Because plants can be good neighbors here in America, they are more efficient . . . daily work is more pleasant . . . living more worth-while. ALUMINUM COMPANY OF AMERICA, 2193J Gulf Building, Pittsburgh 19, Pennsylvania.

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OTHER STATE FACTS . . .

Our taxes paid in the State of Ohio are sufficient to provide for the education of 2,271 school children each year . . . in Alabama, 2,391 children . . . in the State of Washington, 1,900 children . . .*

* * *

We have important payrolls (over $100,000) or pay important taxes (over $100,000) in twenty-six of America's forty-eight states.

* * *

Our annual payroll in Arkansas is sufficient to support 30 average independent grocery stores; in California, 146 stores; in Connecticut, 47 stores.**

*Educational expenditures per state from Statistical Abstract of the U. S., 1950.

**Avg. grocery store sales from 1948 Census of Business, U. S. Dept. of Commerce.

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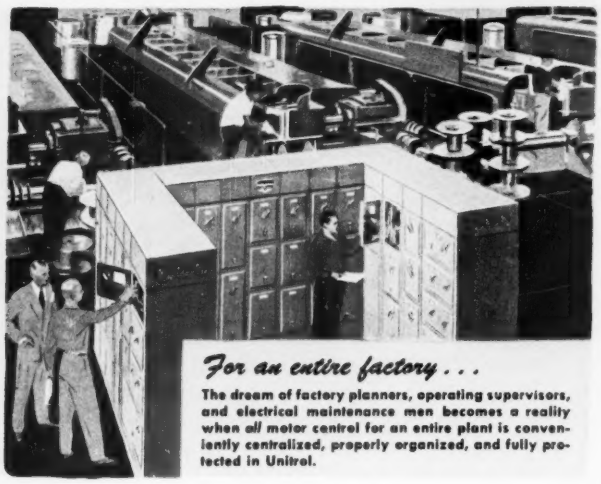
Unitrol permits the orderly assembly of needed control equipment and electrical accessories such as meters, transformers, indicating lamps, etc., into an out-of-the-way, yet readily accessible single unit.

For one department . . .

Unitrol assures maximum dependability to motor-driven equipment. Machine operators cannot tamper with the properly housed, remotely located control equipment in Unitrol. Grouped controls make inspection convenient, more certain.



For an entire factory . . .

The dream of factory planners, operating supervisors, and electrical maintenance men becomes a reality when *all* motor control for an entire plant is conveniently centralized, properly organized, and fully protected in Unitrol.

Of the many motor control advances pioneered by Cutler-Hammer engineers, Unitrol has undoubtedly provided the solution to more long-standing problems of factory layout, efficient operation, and proper electrical maintenance than any other development. Unitrol permits the economical, safe, and convenient consolidation of control equipment to simplify machine installations and provide uncluttered space for men and materials handling. More than that, Unitrol simplifies the installing and mounting of motor control, eliminating costly wall or floor preparation or special construction.

The name UNITROL is a Cutler-Hammer trade mark, registered in the United States Patent Office. It identifies the genuine and original standardized flexible control center, an outstanding engineering achievement pioneered by Cutler-Hammer, Inc.

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Unitrol also permits changes to be made quickly and easily, either the replacement of individual controls or the entire rearrangement or relocation of the control equipment. The close grouping of control elements in Unitrol provides many continuing benefits. Inspection is more convenient, safer, definitely more regular. For important savings in space, in time, in costs, in labor . . . for today, tomorrow, and for years to come . . . insist on Unitrol, the truly modern motor control. CUTLER-HAMMER, Inc., 1275 St. Paul Avenue, Milwaukee 1, Wisconsin. *Associate:* Canadian Cutler-Hammer, Ltd., Toronto.

LABOR BRIEFS

PENSION EXPERT Wilbur Cohen, adviser to the federal social security commissioner, is chairman of WSB's new committee on stabilization policy as it applies to health, welfare, and pension plans (BW—Aug.18'51,p36).

•

A trip to Moscow may make a man's politics suspect, but it isn't just cause for firing him, says CIO's anti-Communist United Auto Workers. It's contesting dismissal of a Hayes Mfg. Co. employee in Grand Rapids who visited Russia as a guest of Soviet labor unions.

•

Official forms to be used in applying for wage adjustments may now be obtained from WSB's regional offices.

•

A mutual-aid pact signed by all unions in AFL's Maritime Trades Dept. unites some 250,000 ship officers and seamen, radio operators, longshoremen, tugboatmen, and allied workers for joint action —where necessary—during contract negotiations.

•

It can be libelous, says Kentucky's Court of Appeals, if a union advertises an employer as "unfair" without "just ground." The court approved damages assessed against the Paducah (Ky.) Central Labor Union.

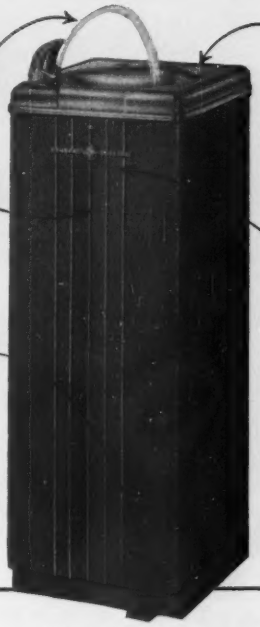
•

Strike medals are being awarded by Toledo Local 12 of UAW to 800 workers involved in pension strikes at nine plants last year. They're inscribed: "In appreciation of your loyalty and support in the struggle to win security for worker's family."

•

The shoe industry is the latest eyed by UMW's catch-all District 50. The union has petitioned for an election at the Bender Shoe Co., in Somerset, Pa.

Plan for Satisfaction!
Specify the dependable new G-E Water Cooler, it's



SATISFYING
Water stream is solid and properly angled to provide a full, satisfying drink. No squirt, no splash.

HANDSOME
The all-new styling with its sleek lines, the cool-green wrinkle finish, the soft lustre of a stainless-steel or the gleaming white of a porcelain top—blend ideally with modern surroundings.

CONVENIENT
The sure-tread foot pedal control permits drinking when hands are full. Easily operated by the daintiest foot, yet sturdy enough to withstand abuse.

ECONOMICAL
Average cost of operating is less than three cents a day.

SANITARY
Top is scientifically designed to avoid splash—no corners or crevices to catch dirt. Sturdy, streamlined bubbler guard prevents lips from touching nozzle.

DEPENDABLE
The hermetically sealed refrigerant system is produced with the engineering skill and design experience that come from more than 25 years in refrigeration research and manufacture.

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WATER AT WORK...CAN SAVE YOU MONEY!

Cool, convenient, sanitary drinking water makes your payroll dollar worth more by improving employee efficiency and morale... increases sales by building customer goodwill.

ASK your local G-E dealer for advice on your water cooler requirements. Look for his name in the classified pages of your telephone book.

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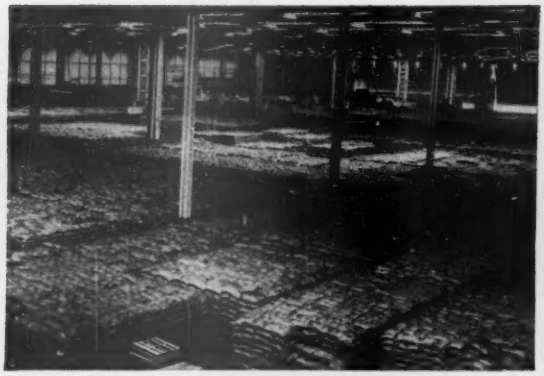


1950 Bags of beans filled the bomber plant when Cadillac got the contract, in August, to build tanks there.

1951 Within a year, Cadillac converted the warehouse into the country's largest tank arsenal.

Warehouse to Tank Plant—in One Year

A year ago last month more than 39-million lb. of bagged beans filled the 53-acre Air Force plant next to Cleveland's airport. Today T41 Walker Bulldog tanks are rolling off the plant's assembly line. How General Motors' Cadillac Motor Car Division, starting with only a handful of men, transformed the building from a commodity warehouse to an armament cornucopia is a lesson in industrial ingenuity.

• **Determined Growth**—Cadillac moved into the World War II aircraft factory on Aug. 15, 1950. That's the day its Detroit works manager, E. N. Cole, came to Cleveland as tank plant manager with a nucleus of 55 people—production men, engineers, and personnel, financial, and purchasing specialists. On March 27, 1951, three months ahead of schedule, the first tank rolled off the line. Today Cole's team numbers more than 5,600.

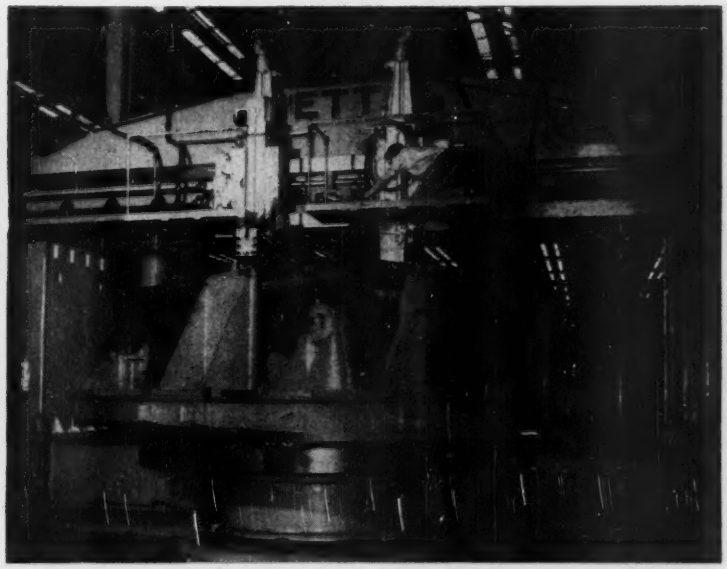
Cleveland industrialists swear it took nothing short of black magic to do the job in so short a time. The building, designed for aircraft manufacture, had to be adapted to tank work; a large, skilled staff had to be assembled in a tight labor market; more than 40,000 pieces of machinery and equipment were found and are now installed and working, despite a growing machine tool shortage; thousands of suppliers and subcontractors were lined up; and tough-to-get materials, or substitutes for them, were found.

• **Why Cleveland**—Offhand you'd suspect that booming Cleveland, with help

SCHOOL In cubicle classrooms welding trainees learn the special art of welding thick armor plate.

FIXTURES Cadillac designed special rigs to position work so welds are made "down-hand."

ASSEMBLY Turret joins hull near the end of Walker Bulldog assembly line. "Basket" (center) is crew compartment.



TOOLS Rebuilding and modifying old machines, such as this vertical boring mill, helped get production under way fast.

Mr. E. N. Kreis, Vice-President and Works Manager, The Bastian-Blessing Co., Chicago, Illinois

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"... it had tricks up its sleeve that drew lots of skills, like a bear to honey ..."

TANK PLANT starts on p. 42

so hard to get, wouldn't be too attractive for setting up a munitions plant. But Cadillac had good reasons for going to Cleveland.

• It's the only other metal-cutting center, besides Detroit, that could handle the tank program. It had both the skills and the supporting industries Cadillac needed, as well as the right building—which Detroit didn't have.

• Though Cleveland was a tight labor area, GM felt that impending production cutbacks in nonessential industries would release plenty of skilled workers for tank making. GM itself had 15,000 workers in its Cleveland Diesel and Chevrolet plants, some of whom could be absorbed into the tank plant if necessary.

• **Plant Switch**—At the start, though, Cleveland seemed out of bounds to GM. The only suitable plant Army Ordnance had to offer was in Madison, Ill. The Bell Aircraft plant in Buffalo and the Lustron plant in Columbus were also considered.

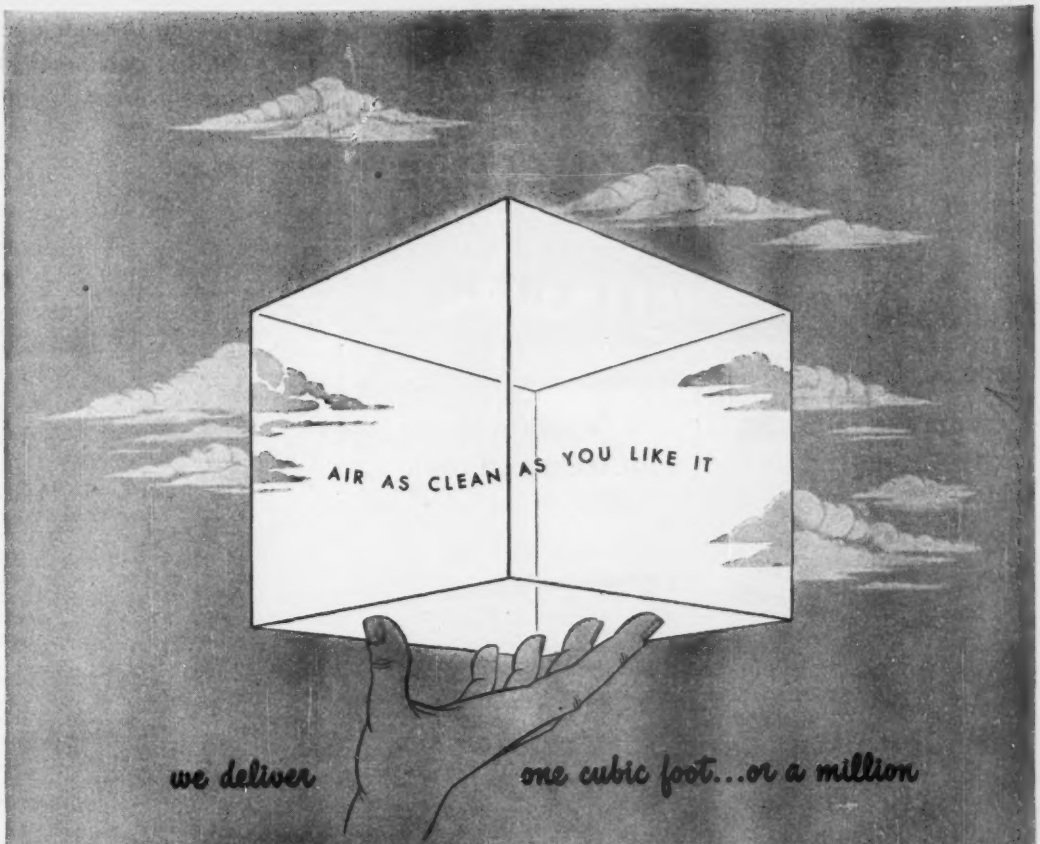
The trouble was the Air Force planned to use the Cleveland plant for a magnesium program. Ordnance and Air Force finally made a swap. Ordnance convinced Air Force that the Madison plant was just as suited to magnesium production. It was on the Mississippi River, so it had all the water power it needed for processing. And foundry labor was plentiful.

• **Labor Turnout**—Cadillac got the plant it wanted, and its anticipation about labor proved right. The first day Cadillac opened its doors to job applicants, nearly 9,000 people lined up outside the plant. Since then, some 87,000 job applicants have come in. Of course, Cadillac didn't get all the people it hoped for in certain skills. But it had some tricks up its sleeve that drew lots of needed skills, like a bear to honey.

One attraction was that Cadillac could offer indirect benefits that other GM employees were getting, such as group insurance, liberal retirement pensions, and seniority with the over-all corporation.

Cadillac also took to the air to recruit help. It sponsors a 15-minute TV news program, televised from the plant, in which it calls for certain skills. To get welders for armor plate, it started a school where it now trains 120 people a day on three shifts. The course takes about 21 days.

The talk in Cleveland is that about half the welders in town are Cadillac-



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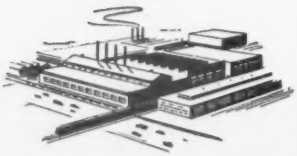
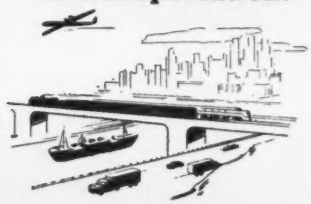
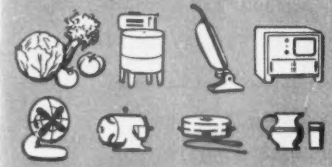


every step of transportation.



Gaylord Boxes PROTECT the products



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". . . Knowing the machines you want and getting them are two different things these days . . ."

TANK PLANT starts on p. 42

trained. Many get their training and then go to other companies, passing themselves off as skilled welders. Cadillac says it expected that.

Next to welders, draftsmen are the toughest to get. Cadillac gets around this one by contracting much of its design-drafting work to outside engineering firms in Ohio and Michigan.

• **Beefing Up**—While plant personnel was going after employees, W. D. Millington, the superintendent of Cadillac's methods and equipment division, put the building in shape for tank production. In certain places the structure wasn't strong enough for cranes to lift the 25-ton tank or some of its components. It had to be beefed up—with A-frames added for the cranes. In spots where there would be heavy loads, exceeding floor capacity, structural members were extended through the basement to the ground.

Ordnance told Cadillac to equip and refurbish the plant as if it were to be operated for many years. That it did. For example, it cost $500,000 to build a waste treatment plant. A proving ground to duplicate field conditions was laid out near West Richfield, Ohio, 25 miles from the plant.

• **Tooling Up**—How Cadillac got its machinery is perhaps the most amazing phase of the tank plant story. When Cadillac was awarded the contract, Millington took half of the Detroit tool engineering force and sat them down to figuring machinery requirements. Mostly they had to work from prototype parts. Within two and one-half days, the group had whipped together machine needs. And they weren't very far off the beam; of the 3,500 machine tools ordered, only 12 couldn't be used.

Knowing the machines you want and getting them are two different things these days. Cadillac immediately sent out 12 engineers with equipment lists. With Ordnance engineers, they combed Ordnance arsenals and warehouses, coming up with 8% of their needs from these sources. Used machines were bought and rebuilt. But most of the equipment had to be ordered new.

• **Special Machines**—The special machines and fabricating methods conceived by Cadillac production men take a lot of the pain and manhours out of tank making. For instance, a vertical boring mill with a 24-ft. bed was needed, but couldn't be had in less than a year if ordered from a machine tool builder. But 12-ft. boring mills were

Wanted: five million tons more scrap!

If product manufacturers are to get the steel they need, more scrap must be delivered *now* to America's thundering steel mills.

The shortage of iron and steel scrap is acute. With steel production already over 100 million tons a year, scrap yards (like the one above) are scraping bottom. By the end of 1952 steel capacity will reach 117 million tons, and the industry will need five million more tons of scrap than last year—over and above scrap available from steelmaking itself.

It takes steel scrap to make new steel. Many business leaders have recently appointed salvage committees in their plants to check on worn-out equipment and see what can be sold to the scrap dealer. It will take *industry-wide action* to prevent even more critical scrap shortages.

Why not form such a committee to cover *your* plants? All doubtful equipment should be inspected, from obsolete jigs to worn-out machinery. To get iron and steel scrap for the new steel we all need, everyone must pitch in and help.

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MIDDLETOWN, OHIO, WITH PLANTS AND SALES OFFICES FROM COAST TO COAST
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available. So Cadillac worked with makers of the Betts machine, had its side columns extended to give a swing clearance of 24 ft. A grinding head was added to the machine so that it now can perform four instead of two operations. The machine was rebuilt in five and one-half months, cost half as much as a new one.

• **The Art of Welding**—Welding armor plate is a special art. Cadillac learned much about it in its tank production during World War II and put this knowledge to work on the T41. It built its own positioning fixtures so that a man is always doing down-hand welding—the easiest way. The fixtures can be reversed so that one side of a joint can be welded, then the other. That relieves thermal stresses that can build up and crack the weldments.

The company's tool engineers have revived a stunt they used in the last war—welding the tank hulls on a merry-go-round. Each hull is suspended on a car in such a way that it can be turned and tilted as the car carries it past a circle of welders. As it reaches each welder, the hull is automatically set at the most convenient position for that particular weld. Each man thus becomes a specialist; he learns how to do his weld well and quickly. Before, welders used to flock around a hull, get in each other's way, and never became expert on any one weld; they did them all.

The 84-in. ball bearing on which the tank turret rides is a vital component. Cadillac tried to farm out production of this three-ring part, but couldn't find anyone to do it with the required tolerances. So it tackled the job itself. It set up special grinding equipment and induction hardening machines and now is turning out high-tolerance bearings fast enough to supply them to other tank manufacturers as well.

• **Tool School**—Because tank armor today is much harder than the plate in World War II vehicles, Cadillac had to shift to tungsten carbide tooling for many of its cutting operations. Carbide tooling is tricky and not so easy to handle as high-speed steel tools. So Cadillac put factory supervisors through a week-long schooling on carbides. They were told carbide tools are more brittle, have to be better supported in the tool holder, won't stand vibration and chatter.

Machinery and methods installed at the plant are flexible. Cadillac was told that it probably will produce other type vehicles, and it wanted to be able to use the same equipment. As a matter of fact, a new vehicle, a gun motor carriage, is nearing completion.

• **Search for Materials**—Even though it's a tank builder, Cadillac has plenty of trouble getting materials these days. It has to play the angles. "Friends are better than priorities," says plant manager Cole. He has men on the road all the time expediting materials. And he thinks nothing of hopping into his Beechcraft Bonanza and flying to Youngstown or Buffalo to speed up delivery of parts or materials holding up the line. One of his suppliers couldn't deliver a 5-hp. electric motor because silver-bearing copper wasn't to be had. Cole put his "friends" theory to work; through a couple of phone calls he found GM's Delco-Remy division had some of the stuff and was willing to part with it. The supplier got his metal.

• **Make-Do's**—When Cadillac got started, it found that it was competing with other makers for cast armor plate, and the stuff was in short supply. Rolled armor turned out to be easier to form, seemed to have better ballistic characteristics, and—most important—was readily available. So the switch was made from cast to rolled plate. When it became hard to find foundry capacity for small steel castings, Cadillac changed to forgings.

It is now starting to use boron steels because they're easier to get than some of the alloy steels. Making parts of boron steel is still a finicky business; it's a young metal. Cadillac avoids trouble by checking the hardness characteristics of each batch of boron steel and then altering the heat-treatment process as required.

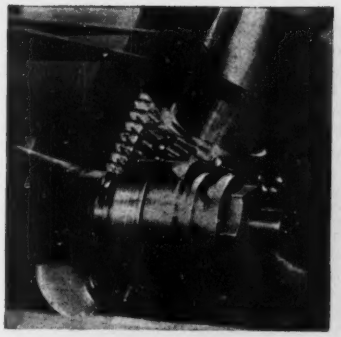
• **The Man Responsible**—The man who organized this country's biggest tank arsenal in record time is a product of GM's own engineering school. Ed Cole finished his engineering training in General Motors Institute in 1932. He has moved fast within the corporation since then. When Cadillac took on the Army's light tank and combat vehicle program in 1943, it made Cole its chief design engineer on this job.

Cole's wartime tank experience plus postwar jobs as Cadillac's chief engineer and works manager stand him in good stead for his present chore. Under his aegis, the tank's plant engineering group is redesigning the basic T41 for faster production, easier maintenance in the field.

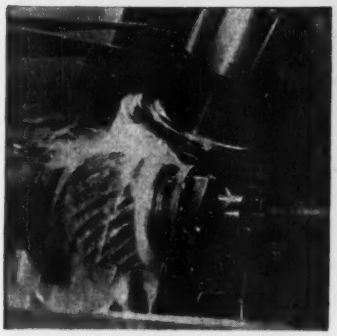
Cole thinks it's about time something was done to make life easier for the soldiers who operate tanks. A stint with Gen. Patton's armored divisions on desert maneuvers in the last war taught him that a tank is home to its crew most of the time, a fighting machine infrequently. Yet World War II design gave first consideration to safety; comfort came last.

Cole believes that comfort features can make a whale of a difference in the morale of a tank operator. He favors design improvement on that line.

Although he's holding down a big job, Cole is a youngster as management men go. He'll be 42 this month.



From gear blanks to . . .



Finished gears in 58 sec. on new . . .

High-Speed Cutter

New hobbing machine operates at fastest speed ever with steel hobs, may revolutionize gear cutting.

Two 3½-in. diameter, 22-tooth helical gears in 58 seconds. That's the kind of production possible now—with Michigan Tool Co.'s high-speed gear hobber. The machine embodies new principles and may usher in a new era in gear cutting.

Hobbing is a broachlike method of cutting gears in quantity from steel bar stock. The hob, nothing more than a special type of milling cutter, looks like a threaded cylinder that's been gashed to make many cutting teeth (pictures, above).

• **Fast Tooling**—Right now hobs are available only in high-speed steel. But the new hobbing machine operates more than twice as fast as steel-hobbed machines ordinarily do—at rates thought possible up to now only with tungsten carbide tooling.

• **New Design**—How can this machine operate at such high speeds? One of the main reasons is its greater rigidity, which cuts down the vibration. The

DAYLIGHT IN AN OCEAN OF DARKNESS

Wresting this Mid-Pacific airfield from the grip of the jungle presented many problems. But lighting it to an overall, uniform intensity without obstructing runway approaches seemed almost impossible—*until* the contractor consulted Graybar.

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IN OVER 100 PRINCIPAL CITIES

trend in the whole machine tool business in the past few years has been toward greater rigidity, but Michigan Tool has achieved greater rigidity in an unusual way—by redesigning the machine instead of, say, just using heavier castings.

The insides of hobbing machines are ordinarily a complicated mixture of slides and internal gear trains. Michigan eliminated many of the slides, put in hydraulic feeds instead of the gear trains. And it added a flywheel to smooth out the rotations.

For today's steel tool speeds, or tomorrow's carbide tool speeds, the machine can be readily adapted to automatic loading. Credit for this feature, too, goes to the design.

• **A Lesson Learned**—Michigan Tool engineers think their new machine points up a significant lesson: Many of the faults attributed to high-speed tools should have been ascribed instead to the machines on which they were used.

• **Cost-Cutter**—Because of the machine's built-in speed, the company feels its single-spindle job can turn out just about as much work as present multispindle hobbers with less than eight spindles. That'll mean a big saving in machining costs.

PRODUCTION BRIEFS

Corncob concrete, being researched by the Dept. of Agriculture, looks promising because of its lightness and insulation qualities. Corncob pellets, about ⅜ in. in diameter, replace the coarse aggregate. They are soaked for five or six hours in water before going into the concrete mix.

•

Atomproof: If you want to know how to make your factory that way, Walter Kidde & Co., Inc., Belleville, N. J., will send you a booklet called "How to Prepare Your Plant for Atomic Attack." It tells about the atomic bomb's destructive power, how to strengthen a plant's construction, and how to maintain production in the event of a bombing.

•

Professors in overalls, 19 of them, spent the summer working with engineers and shop men at Westinghouse plants. Aim is to bring the engineering student, through his instructors, a picture of current industrial problems.

•

Aircooled engines are being made by Continental Motors for the U. S. Air Force for an undisclosed use in ground installations. The new line consists of two-, four-, six-, and eight-cylinder engines with a power range of from 15 hp. to 250 hp.

What's good for the looks of a good mixer?

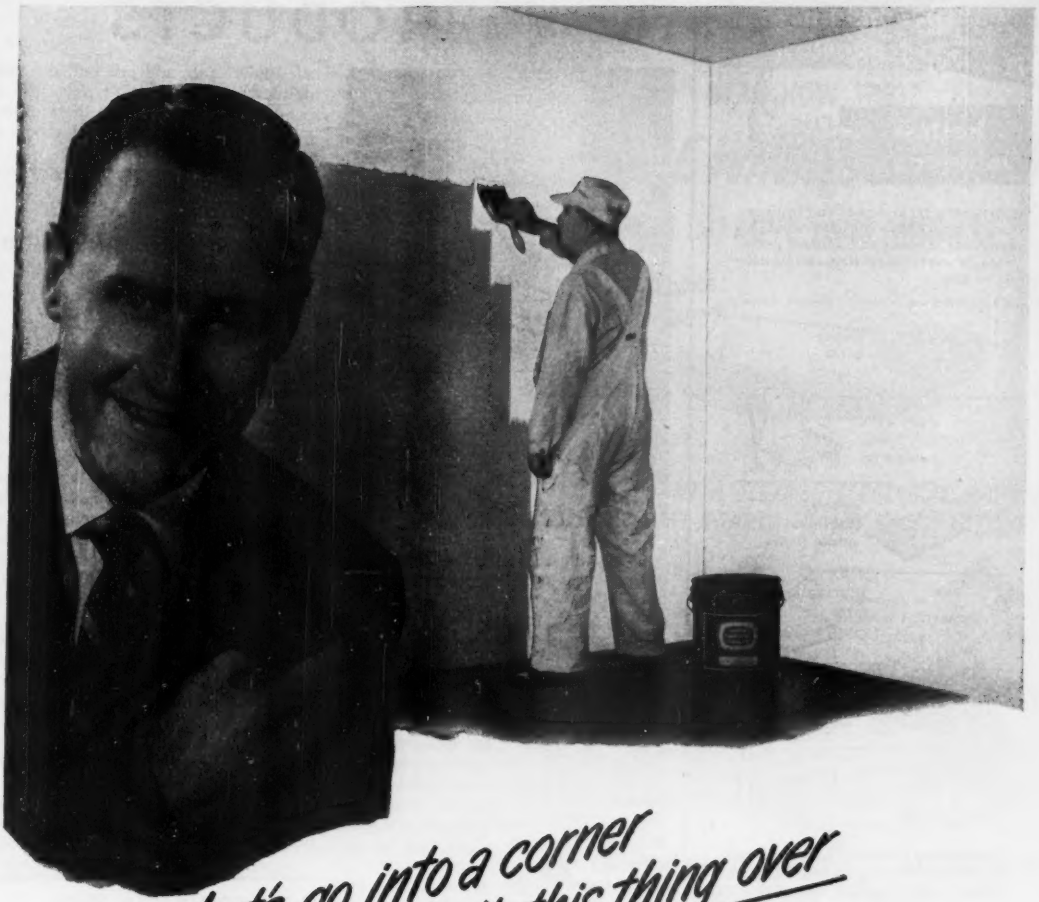
...*a brush!* Are you using this formula for making paint jobs look better and last longer?

The leading west-coast manufacturer of transit cement mixers—like thousands of other fabricators—believes in exposing clean, bare metal to the paint gun for long-lasting protection and good-looks. So they give all parts the fast-cleaning treatment with Osborn Wire Cup Brushes. These power brushes get into weld corners—also do a speedy job on large surfaces, removing weld spatter, rust and dirt.

You can count on the nearby **Osborn Brushing Anlayst** for good advice on cleaning problems like this . . . or to help on all kinds of product finishing operations . . . manual or mechanized. Call or write *The Osborn Manufacturing Company, Dept. 521, 5401 Hamilton Avenue, Cleveland 14, Ohio.*

OSBORN

LOOK FOR THE NAME OSBORN . . . RECOGNIZED EVERYWHERE FOR QUALITY WORKMANSHIP AND MATERIALS



Let's go into a corner and talk this thing over

You want to be sure. Yes, you want to be *absolutely* sure you're getting the most out of your maintenance painting dollar. So let's go into a corner with your painter and make this important test.

You take a gallon can of Barreled Sunlight and a gallon can of any other paint you want to choose and thin each according to directions on the can. Then your painter starts in the corner and paints one wall with Barreled Sunlight and the other wall with the other paint . . . as far as each thinned gallon will go. And realizing that labor . . . painting time . . . represents 80% of the cost of any paint job you'll be careful to clock the time involved in applying each paint.

Once you've made this test . . . measuring the yardage, the appearance after drying, and the painting time involved . . . we'll wager dollars to doughnuts that you'll be convinced that Barreled Sunlight will give more for your painting dollar than any other paint.

Consult one of our representatives. Write, and he'll gladly call.

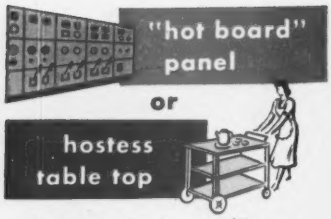
BARRELED SUNLIGHT PAINT COMPANY, 1-I Dudley St., Providence, R. I.

Barreled Sunlight *Paints*

In whitest white or clean, clear, wanted colors, there's a Barreled Sunlight Paint for every job

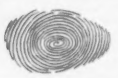
IT ALWAYS COSTS MORE NOT TO PAINT!

For over half a century the symbol of quality and dependability among paint buyers for leading industrial, institutional and commercial buildings



CONSOWELD Laminates and Impregnated Papers have met and mastered *hundreds* of usual and *unusual* problems. It's very likely they can be useful to *you*.

CONSOWELD is many different things:


finger print plates

clean-easy nursery trays, table tops

strong—but light—glider floors

snag-free inspection table surfacing

clean-punch insulating washers

low-maintenance, high-beauty surfacing for flush doors

CONSOWELD *Industrial* Laminates can be sawed, formed, punched, stamped, drilled, milled, turned, threaded and planed. In panel form, they are used for garment cutting and leather finishing table tops; tanning pasting boards; wall, door and floor surfacing in military housing, etc.

CONSOWELD *Decorative* Laminates can be bonded to almost any smooth horizontal and vertical surface to make a *finished* surface that is *good for a colorful lifetime.*

CONSOWELD *Impregnated Papers*, molded to plywood or basswood, make aircraft floor, wall and ceiling panels; glider floors; seats for troop-carrying aircraft, etc.

What is *your* problem? Tell us all about it. Maybe we have the answers. *Consolidated Water Power & Paper Company*—manufacturers of CONSOWELD Laminates and *Consolidated* Enamel Papers—*Wisconsin Rapids, Wisconsin.*

CONSOWELD
decorative and industrial
LAMINATES
FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, RESIDENTIAL APPLICATIONS AND USES

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NEW PRODUCTS

Foolproof Recorder

One mistake is often all it takes to ruin a sound-recording job and waste a film. That's what led RCA Victor to design a sound-recording unit that gives you a margin for error and erasure—the "400" Magnetic Sound Projector.

The unit uses a magnetic process to record a commentary directly on 16mm. film. A strip of magnetic oxide is applied to the edge of the film either before or after the picture is made. The commentator talks into a hand microphone while watching the picture unreel, puts the sound track on the film. He can play back all or part of the commentary by throwing a switch.

To make changes or corrections, you simply switch on an electronic erasing device that automatically blanks out the portion to be re-recorded. The recorder-projector requires no laboratory processing, covers a frequency range of 80 to 7,200 cycles.

The setup makes it possible to change the sound track on the same picture several times for different types of audiences. RCA Victor says its system costs about one-third as much as conventional sound-recording techniques. It is recommended for use by promotion and sales specialists, commercial studios, and schools.

- *Source: RCA Victor, Camden, N. J.*
- *Price:* $850.

Tubing Fits Like Sock

A textile wrapping called Stretchrite cuts down wrapping time and turns out a better looking bale, says maker Gittlin Bag Co. Made in sizes from 13½ in. to 80 in., the burlap and cotton tubing stretches tightly over bales of all shapes.

The company suggests you hang a roll of the tubing from the ceiling. Put the bale underneath, and just pull the tubing down around it—as you'd pull a sock over your foot. Close the top and bottom with a wire tie, and the bale is ready for shipping.

- *Source: Gitlin Bag Co., P. O. Box 1060, Newark, N. J.*

For Slow Assembly Lines

Organizing an assembly job is a cinch, says Coleman-Pettersen Corp., if you have an Erectosembly work station. The integrated unit is designed by the company to replace separate bins, tables, and benches in low-speed production lines—such as those for assembling radio and electronic parts.

Erectosembly consists essentially of a workbench and vise setup, plus a shelflike arrangement of storage bins. The slanting bins are attached to the bench and are located above and to the rear of the work area. They hold either large, flat wire baskets for storing fabricated parts and subassemblies, or revolving frames with plastic cups for screws, nuts, and small parts. You can load the bins from the rear, so the worker isn't interrupted. The lower part of the work station includes compartments, drawers, and extension boards.

The company makes up the units in a variety of combinations to meet individual specifications.

- *Source: Coleman-Pettersen Corp., 2110 St. Clair Ave., Cleveland, Ohio.*
- *Price: About $100.*

NEW PRODUCTS BRIEFS

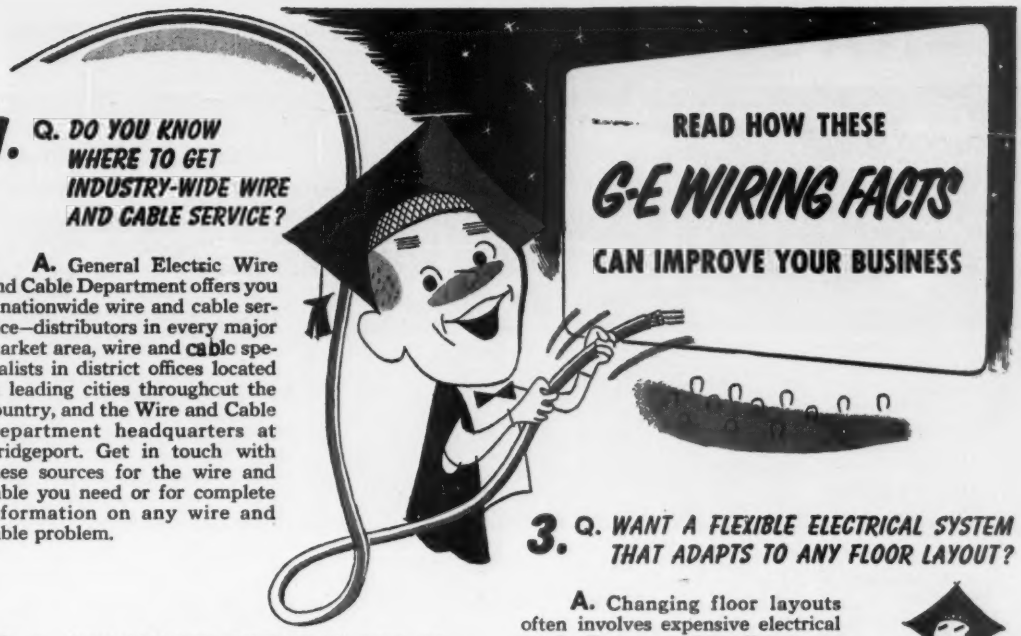
A ¼-in. electric drill becomes a wood planing tool when it's hooked up to an adapter turned out by International Twist Drill Corp., 624 Wyandotte St., Kansas City, Mo. You can get the unit already assembled or in kit form at slightly less cost.

•

An industrial deepfreeze made by Deepfreeze Distributing Corp. chills metal parts that must be shrunk to fit in or around others. To speed up the chilling job, the freezer goes as low as —120F. The address: 3928 Reading Road, Cincinnati 29.

•

Key-Hole Anti-Freeze is a chemical compound that protects automobile locks against freezing. You squirt the transparent liquid directly into the keyhole, and it lasts for the life of the car. Manufacturer Elektrik Seal Laboratories, 629 W. Washington St., Chicago, says it's good for all locks that must withstand severe weather.



1. Q. DO YOU KNOW WHERE TO GET INDUSTRY-WIDE WIRE AND CABLE SERVICE?

A. General Electric Wire and Cable Department offers you a nationwide wire and cable service—distributors in every major market area, wire and cable specialists in district offices located in leading cities throughout the country, and the Wire and Cable Department headquarters at Bridgeport. Get in touch with these sources for the wire and cable you need or for complete information on any wire and cable problem.

2. Q. HOW CAN YOU SAVE UP TO 30% OF THE INSTALLATION COST FOR THE WIRING AND ELECTRICAL EQUIPMENT IN A NEW OFFICE BUILDING?

A. It is possible to obtain an installation saving of up to 30% by the use of a 480Y/277-volt distribution system for fluorescent lighting, motors, and other electrical equipment. The economies of G-E remote control switching for the fluorescent lighting makes the installation of this higher voltage distribution in the entire building economically practical.

G-E Construction Materials Division for service where—and when—you need it

Quick, comprehensive service on any G-E wiring material is yours. Just call your local G-E Construction Materials distributor. There is one in every major market area to give you service—where you need it—when you need it.

Remember, too, that at any G-E Construction Materials district offices or at the G-E Construction Materials Division at Bridgeport, engineers and specialists are ready to help you on your wiring materials problems. Address Section K64-910.

You can put your confidence in—

GENERAL ELECTRIC

3. Q. WANT A FLEXIBLE ELECTRICAL SYSTEM THAT ADAPTS TO ANY FLOOR LAYOUT?

A. Changing floor layouts often involves expensive electrical work. But not when floors are Q-Floors equipped with G-E Q-Floor wiring—the complete steel floor with raceways spaced on six-inch centers. With this system raceways are always available just under the floor surface for immediate installation of outlets. Investigate G-E Q-Floor wiring before you plan your new facilities for economy in the years ahead.

4. Q. HOW CAN WATCH DOG* STARTERS HELP YOUR PRODUCTION PICTURE?

A. G-E Watch Dog fluorescent starters can keep your production picture bright by keeping lighting at its best. Watch Dog starters promote steady, efficient fluorescent lighting—cut out aging lamps that flicker and blink.

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In these industries...	...this was the average pay for... The Big Shots		No. 2 Men		No. 3 Men		...and this was total executive pay as a percent of sales	
	1940	1949	1940	1949	1940	1949	1940	1949
Agricultural Machinery (7 companies)	$48,000	$108,000	$30,000	$67,000	$25,000	$54,000	0.3%	0.2%
Aircraft (15 companies)	44,000	74,000	29,000	57,000	19,000	43,000	0.5%	0.3%
Airlines (9 companies)	20,000	41,000	14,000	36,000	12,000	29,000	0.9%	0.4%
Apparel (11 companies)	38,000	46,000	27,000	40,000	23,000	37,000	1.8%	1.1%
Automobiles (8 companies)	109,000	219,000	81,000	156,000	68,000	146,000	0.2%	0.2%
Chemicals (24 companies)	54,000	84,000	41,000	66,000	37,000	61,000	0.7%	0.4%
Cigarettes (4 companies)	171,000	227,000	101,000	139,000	97,000	95,000	0.4%	0.2%
Department Stores (29 companies)	50,000	84,000	38,000	65,000	31,000	55,000	0.6%	0.5%
Hosiery (9 companies)	31,000	66,000	19,000	44,000	14,000	37,000	1.1%	1.3%
Industrial Machinery (25 companies)	44,000	72,000	26,000	51,000	23,000	37,000	1.1%	0.8%
Life Insurance (21 companies)	32,000	43,000	22,000	29,000	17,000	21,000	0.6%	0.6%
Meat Packing (12 companies)	44,000	63,000	31,000	47,000	24,000	37,000	0.1%	0.1%
Nonferrous Refining (16 companies)	81,000	91,000	53,000	67,000	36,000	66,000	0.5%	0.3%
Petroleum Refining (27 companies)	63,000	82,000	40,000	67,000	35,000	55,000	0.2%	0.1%
Radio, Television (6 companies)	42,000	84,000	31,000	67,000	23,000	50,000	0.7%	0.5%
Railroads (21 companies)	56,000	77,000	38,000	46,000	33,000	39,000	0.2%	0.2%
Shoes (9 companies)	31,000	52,000	22,000	47,000	18,000	37,000	0.6%	0.5%
Steel Producers (12 companies)	139,000	155,000	88,000	128,000	66,000	99,000	0.2%	0.2%
Textile Fabrics (8 companies)	65,000	126,000	40,000	77,000	27,000	66,000	0.6%	0.6%
Tires, Tubes (8 companies)	79,000	101,000	35,000	78,000	29,000	72,000	0.3%	0.2%
Toiletries, Soaps (4 companies)	97,000	161,000	68,000	112,000	54,000	91,000	0.5%	0.3%

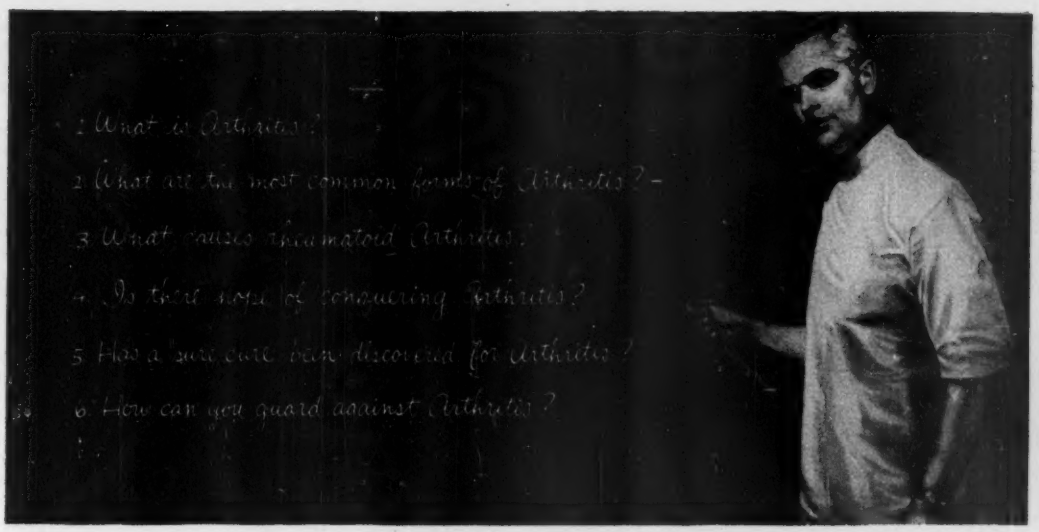
©BUSINESS WEEK

Executive Pay Goes Up—But Not Enough

Top management salaries jumped about 75% from 1940 to 1949, but for many executives it was a treadmill gain. Higher living costs and bigger tax bites left them just about where they'd been. Some executives even wound up taking home less pay. That's why so many companies today are trying other schemes, such as stock options and deferred compensation, to pay executives (BW—Apr.7'51,p45).

All this was spotlighted last week by a National Industrial Conference Board report on executive salaries in 567 companies. The survey breaks down into 45 industrial groups (chart).

• **Losing Race**—Cost of living increased 60% in the 10-year period, and taxes also went up sharply. Together, these factors made the 75% executive pay rise look sick. NICB figured a man


1 What is Arthritis?
2 What are the most common forms of Arthritis?
3 What causes rheumatoid Arthritis?
4 Is there hope of conquering Arthritis?
5 Has a sure cure been discovered for Arthritis?
6 How can you guard against Arthritis?

Can you answer these questions about ARTHRITIS?

1.Q *What is Arthritis?*

A. Arthritis is the term applied to many different diseases affecting the joints of the body. All of the arthritic diseases are characterized by inflammation or swelling of the joints, but these conditions differ widely as to causes, symptoms, and the kind of treatment required. In its various forms, arthritis affects more than 3 million Americans. In fact, it is a leading cause of chronic illness in our country today.

2.Q *What are the most common forms of Arthritis?*

A. Of all types of arthritis, the chronic forms, *osteoarthritis* and *rheumatoid arthritis*, are by far the most common. Osteoarthritis is primarily the result of aging, or normal wear-and-tear on the joints. It rarely develops before age 40 and it seldom causes severe crippling. Rheumatoid arthritis is a much more serious disorder. It usually strikes between the ages of 20 and 50, and unless it is properly treated the joints may become permanently damaged.

3.Q *What causes rheumatoid Arthritis?*

A. Although the exact cause of rheumatoid arthritis is unknown, a variety of factors are involved in its onset. In this condition, there is usually evidence of disease of the entire system—such as loss of weight, fatigue, anemia, infection, emotional strain, and nutritional deficiencies. Since many factors may be involved, doctors stress the importance of a *thorough physical examination* of each patient. This is essential to proper diagnosis and treatment, which in all cases must be based upon the patient's *individual* needs.

4.Q *Is there hope of conquering Arthritis?*

A. Yes, indeed! Methods of treatment for all types of arthritis are constantly being improved. The outlook for further advances is now more hopeful than ever before—thanks to research which is yielding new facts about the underlying causes of arthritis, especially the rheumatoid type.

5.Q *Has a "sure cure" been discovered for Arthritis?*

A. No, indeed! Yet, many people are still misled by claims that are made for certain "arthritis cures" or other forms of therapy that are worthless. Authorities emphasize that proper medical care offers the only hope of permanent relief from arthritis. Today, about 60 percent of the victims can be greatly benefited, *and in some cases completely relieved*, if proper treatment is commenced early.

6.Q *How can you guard against Arthritis?*

A. Doctors say there are certain precautions that everyone can take to help prevent arthritis, or to lessen the effect if it should occur. Here are some of them: keep weight normal . . . try to maintain good posture . . . get sufficient rest, sleep, and exercise . . . eat a balanced daily diet . . . have regular medical and dental examinations . . . maintain a calm mental outlook . . . *see your doctor whenever persistent pain occurs in any joint.*

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Please send me a copy of your booklet, 1051S, "Arthritis."

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making $100,000 in 1940 would have to make $225,000 in 1949 if he was to maintain approximately the same standard of living. Few raises ran as high as that.

The average of all high-bracket salary increases ran far behind the average sales gain of 179% in the same period. Top salaries as a percent of net sales decreased in every industry except hosiery. Only eight industry groups paid executives more than one cent on each sales dollar. A couple went as low as one-tenth of a cent. The 567-company average was .3% in 1949 as against .4% in 1940.

• **Lower Men Better Off**—The highest single salary raise was scored in the automobile industry—$310,000 a year. Far more of the increases, though, were in the lower salary brackets. Among 29 department stores, for example, the salaries of about 15 top men were hiked from $35,000 or less to $70,000 or more. One of these stores, whose sales volume rose from $15-million to $34-million, jumped its total executive payroll 2,659%. That was the biggest gain in any company. It raised salaries as a percentage of sales from .6% to 7.1% in that company.

On the other hand, some companies actually cut their executives' pay. Various reasons were cited: changes in duties, reorganization, drop in sales, partial payment in stock. In all, 31 of the 567 companies cut executive pay.

• **Radio, TV Lead**—Industry by industry, the biggest gain in executive salaries came in the radio and television group. There the average gain for six companies was 275.7% for all officers and directors. In the 10-year period the top salary in the industry climbed from $109,000 to $200,000.

Next to radio and TV came textiles, 201%; airlines, 160%; aircraft, 135%; and department stores, 147%. Lowest gain was in electrometallurgical companies, with only a 15% average boost for executives in four companies.

• **Two Outgrowths**—Inflation between 1940 and 1949 had two clear effects on the executive pay level:

• It virtually eliminated instances of top executives making less than $10,000 a year. At the beginning of the period, you could find plenty of companies paying their second and third men $9,000 or even less. In 1949 only five of the 567 companies in the NICB survey paid any top man less than $10,000. The five, incidentally, included an insurance company with $5½-million in premiums and two grocery stores with sales volume in excess of $2-million.

• It more than doubled the select group of executives making $100,000 or more a year. In 1940 only 88 of the 1,701 executives covered by the survey hit the $100,000 figure; in 1949 they numbered 196.

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WITHOUT EXPERIMENTATION

With an Acme-Gridley Model M Bar Automatic you're ready to *go* on munitions parts like these. No educational orders, trial runs or experimental tooling necessary!

National Acme engineers have taken all those preliminary steps for you, months ago. The standardized tooling and production methods they set up are already proved in use on many batteries of Acme-Gridley automatics, even now turning out countless millions of parts, 'round the clock, for quick rearmament.

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Men and equipment are permanently protected by "Century"® Corrugated Asbestos-Cement Sheets

High on the side of this catalytic cracking tower there are no wind breaks . . . no shade . . . nothing to block driving rain and the fury of storm. Yet inside the elevator tower it's always dry . . . always protected . . . always "a nice day." "Century" Corrugated Asbestos-Cement Sheets make a completely weather-tight enclosure—give permanent protection to men and equipment.

And, despite the fact that the tower is exposed to the elements, maintenance will never be a problem. For in addition to resisting weather, "Century" Asbestos Corrugated *can not burn, rot, or rust*—rodents and termites can't hurt it. It doesn't even need protective painting to preserve it. Consider the maintenance costs these characteristics save!

"Century" Asbestos Corrugated can be applied quickly, easily, inexpensively. The large-size sheets are exceptionally strong, but they can be cut and drilled with ordinary working tools—can be fastened in place with a minimum of labor.

Whatever your building plans—new construction, expansion, or modernization—it will pay you to consider cost-saving "Century" Corrugated Asbestos-Cement Sheets for both siding and roofing. We'll be glad to send complete details on request.

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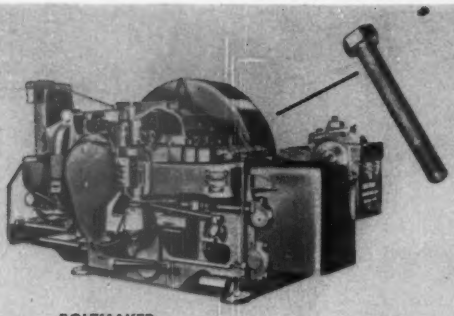
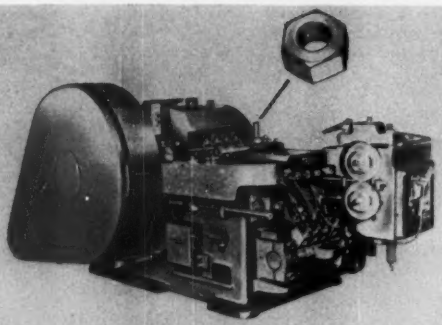


BOLTMAKER



COLD NUT FORMER

Our Job: HELPING YOU

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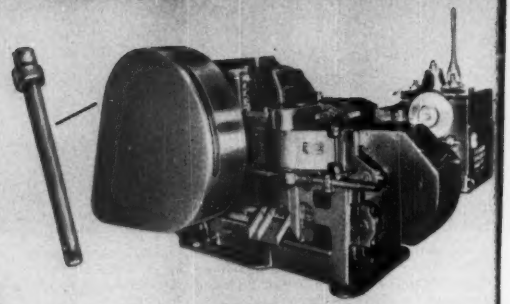

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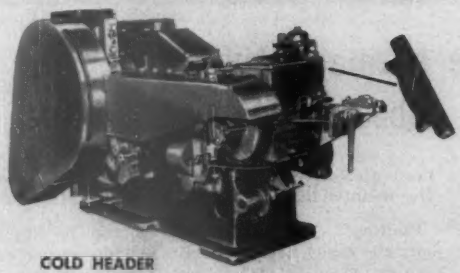
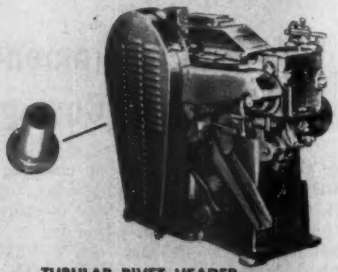
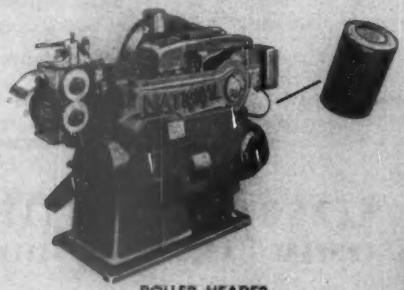


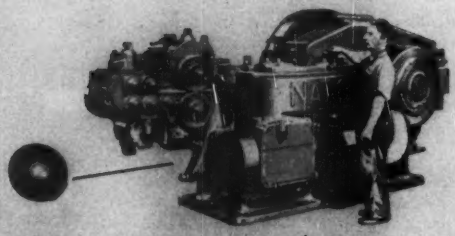
COLD HEADER



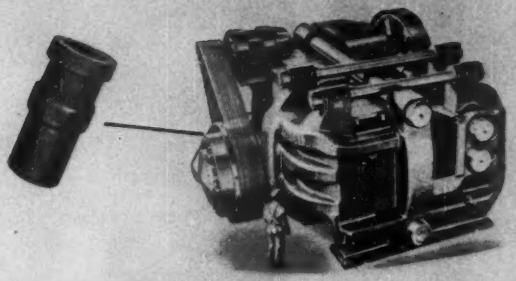
TUBULAR RIVET HEADER



ROLLER HEADER



BALL HEADER



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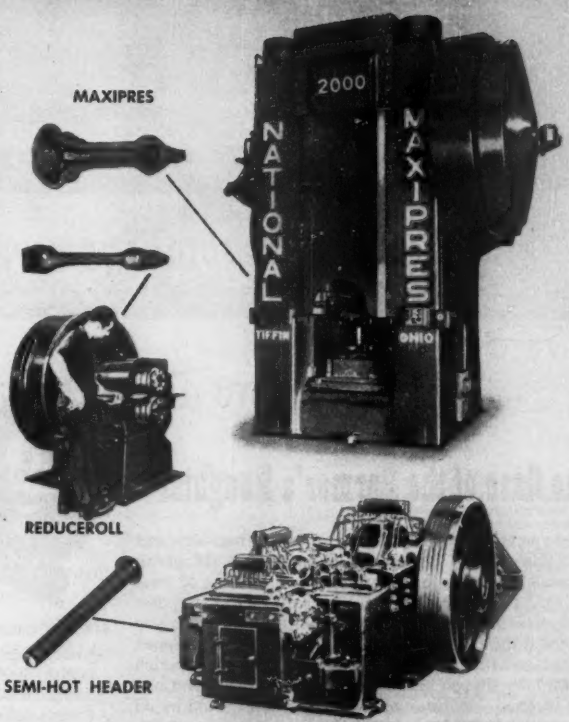
NATIONAL'S all-around experience covers the full range of forging—hot and cold, large and small, ferrous and non-ferrous.

If you have a forging problem—hot or cold—or feel you might benefit by converting a certain part to a forging, why not have us take a look at it?



THIS DOOR IS ALWAYS OPEN

Send us a print or sample of your job. Better yet, pay us a visit. No obligation.

NATIONAL
MACHINERY COMPANY
TIFFIN, OHIO.

DESIGNERS AND BUILDERS OF MODERN FORGING MACHINES—MAXIPRESSES—COLD HEADERS—AND BOLT, NUT, RIVET, AND WIRE NAIL MACHINERY

Hartford Detroit Chicago

NEVER BEFORE

a Dictation Machine at less than the cost of a typewriter

Here's the exciting Webster-Chicago Electronic Memory 228 —the new, performance-proved dictation machine that surpasses ordinary machines all ways! Compare these 228 features!

- Matchless "listenability"—the most important single function in dictation—made possible by Natural Voice Playback—an Electronic Memory 228 exclusive feature!
- New microphone, with start-stop button, and toe-touch Foot Control make the Electronic Memory 228 easiest to operate!
- Automatic erasing—wire can be re-used thousands of times—no shaving or reprocessing necessary.
- Buy only one unit for both dictating and transcribing.
- Truly portable—use at work, home or on trips. With carrying case, the Electronic Memory 228 weighs less than 20 pounds.

Write Dept. TM-2 for a fully illustrated folder

WEBSTER-CHICAGO *dictation machine*

5610 W. Bloomingdale Ave., Chicago 39, Illinois

MERCURY AUTOMATIC CLUTCH

The Mercury Automatic Clutch is a Revolutionary Application of a Basic Mechanical Principle

The Case of the Farmer's Daughter

Where was the farmer's daughter when the fuses blew and the lights went out? That's easy. She was in the cellar with a flashlight looking for the fuse box and thinking of what she would tell that salesman who sold them that water pump which was always blowing the fuses just when you needed it most. If the pump manufacturer had equipped the motor with a *Mercury Automatic Clutch*, the clutch would have slipped instantly when an excessive overload was reached. No fuses would blow. There would be no burned out wiring, motor damage, or consequent fire hazards. You do not have to be a farmer's daughter to appreciate the advantages of a *Mercury Automatic Clutch* installed on an electric motor or gasoline engine. It means easy, efficient starting and safe, smooth operation. *Write for Catalog BW-24.*

OTHER AUTOMATIC PRODUCTS

Cleveland Tapping Machines
Specialty Grinding Wheels
Automobile Water Pumps
Portable Automobile Lifts
Automobile Jacks
Automobile Pulleys

MERCURY CLUTCH DIVISION
AUTOMATIC STEEL PRODUCTS, INC.
CANTON 6, OHIO

Reading for Profit

Management reads heaps of printed matter, but it still takes savvy to know which of many sources to trust.

Ask 50 economists at any given time what's ahead for business, and it's a safe bet you'll come up with a hung jury. You may get a majority to agree on the drift, but the odds are against a unanimous verdict.

If the experts can't agree, then how do top management men arrive at sober decisions after wading through the heaps of reading matter that reach their desks?

That's the question that BUSINESS WEEK reporters in more than a score of big and medium-size cities put to businessmen last week. What do they read? How do they keep abreast of developments that could influence their decisions?

• **No Single Source**—Not one said he relied on a single opinion-maker or publication. For most, it was a lot of ideas and opinions. Top management's job: to decide who is right.

Practically all companies take several magazines, trade papers, capsule-size business letters, association reports, and economic opinion sheets. In Detroit, one auto company estimated it subscribed to at least 300 publications. Another said it tried to buy—and use—everything published that could possibly affect its business.

A southern company recently made a check of its subscriptions, found it spent $2,000 a year for business information in a variety of forms.

• **Selective Job**—Naturally, not all publications carry the same weight with management. Some top officers make a conscious effort to judge the publications they see, find out which is best.

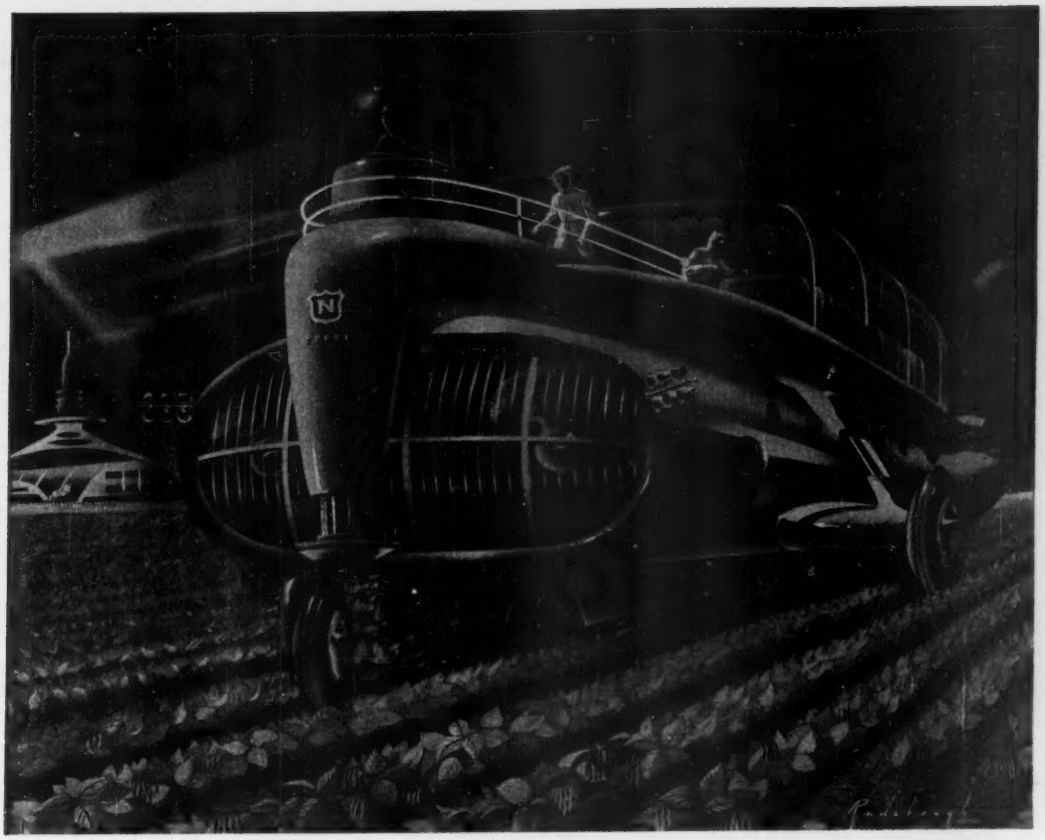
One president made a careful four-year study of one business letter. He found the letter wrong in 65% of its predictions. But he still reads it—for its gossip content.

Most big companies have done something to systematize the problem of gathering information to leave their top operating men enough time to run the business.

As a result, there's a growing trend toward establishing one man, usually an economist, as a catch-all for business information. His job is to keep his eyes open, route material where it should go.

The top man of a big Ohio company put it this way:

• **Accent on Analyst**—"No company can get very far with the vast amount of information available unless it has a



When frozen food plants are put on wheels...

National Oil Seals will protect the bearings

Someday, perhaps frozen food plants will actually roll through the fields, capturing the fresh flavor of fruits and vegetables even more efficiently than now. Imagine the strain such ponderous equipment will put on bearings and other vital machine parts.

When that day comes, you can be sure National will be ready. Our engineers are continually researching and testing oil seals to match the imagination and daring of the most forward-thinking designers.

Because of this "years-ahead" research, National Oil Seals give "years-ahead" performance in your products of today. We welcome tough sealing problems. If you have one, won't you call on us?

DO YOU OPERATE HEAVY EQUIPMENT?

Where big earth movers, farm implements and tractors operate, the efficient performance of oil seals is of extreme importance. Once an oil seal has been "seated-in" to the shaft it is extremely difficult, after removal, to replace it in exactly the same position on the shaft. That's why new ones should be installed on every repair, lube or overhaul job. Equipment makers recommend it. National Oil Seals are available for all leading makes of cars, trucks, busses, tractors and implements. They are available throughout the nation from automotive parts and bearing distributors.

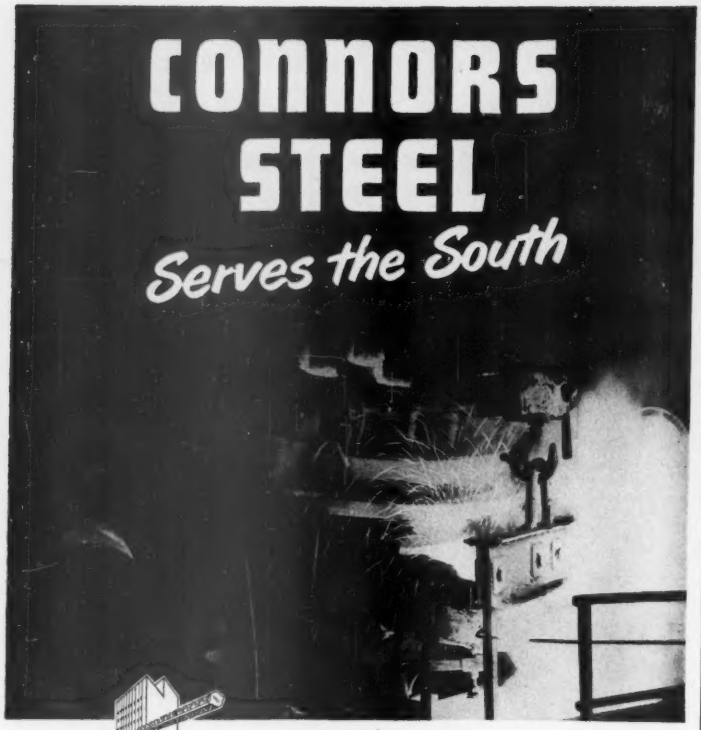
NATIONAL MOTOR BEARING CO., INC.

GENERAL OFFICES: Redwood City, Calif. • **SALES OFFICES:** Buffalo; Chicago; Cleveland; Dallas; Detroit; Milwaukee; New York City; Philadelphia; Springfield, Mass.; Syracuse; Wichita. • **PLANTS:** Redwood City, Calif.; Downey (Los Angeles County), Calif.; Van Wert, Ohio. 2272

NATIONAL OIL AND FLUID SEALS

Original equipment for all cars, trucks, busses and tractors — in fact, wherever shafts turn.

CONNORS STEEL
Serves the South



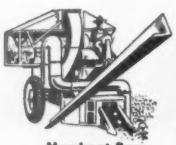
Concrete Reinforcing Bars

Cotton Ties

Barrel Hoops—Tobacco Hoops

Bulk Binding Straps

Merchant Bars (Bed-Spring Frames, etc.)



Merchant Bars (Farm Machinery, etc.)

Fence Posts

Highway Sign Posts

Connors Steel Company, in the heart of the South's iron and steel district, produces electric furnace steel and a variety of light steel products for the rapidly expanding Southern markets.

Located in an area of abundant raw material, skilled labor and convenient transportation facilities, the Connors plant is a modern, well-equipped, low-cost producer.

Keeping step with the industrial growth of the South, plans are now under way to increase Connors' present capacity by more than one-third.

CONNORS STEEL COMPANY

ESTABLISHED 1907

DIVISION OF H. K. PORTER COMPANY, INC.

BIRMINGHAM, ALABAMA

professionally trained and experienced economic analyst who's on the look-out for trends and who can interpret statistics."

There's nothing new about staff economists. A lot of companies have had them for years. Sears, Roebuck & Co., for instance, is a classic (its reports are now used by other firms).

Then, too, you find a good many firms hiring professional economists, giving them the title of vice-president or controller.

• **Big Staffs**—Economic staffs run as high as 50 people in large corporations. They do nothing but check business news, analyze statistics, write reports weekly or monthly for the front office. Management itself follows the news in nonstatistical publications.

In one case, a company subscribes heavily to business reports and magazines. It has its own economist, plus an assistant to the president, to study them for trends. They make separate reports to the top brass.

As a double check, an Ohio manufacturer employs an economist and a market research director. They report to the board at alternate meetings (usually they agree).

• **Monthly Checkup**—Stewart-Warner Corp. follows a procedure common to many. The corporation secretary—with a long list of magazines, business papers, brokers' reports, and government bulletins—compiles a monthly summary. It is circulated among 30 key men. In addition, some of the original material makes the rounds among a smaller group of executives.

At International Harvester, a handful of top-grade magazines and business letters go to a few of the top men. Besides, a staff economist, working with other departments, makes an economic forecast four times a year.

• **Double Duty**—A Cleveland firm uses its treasurer (a professional economist) as a sounding board. He reads all the top publications, reports ideas and trends to his bosses. About a dozen of the key executives get nonstatistical literature routed through the company secretary. The treasurer also makes one trip a year to Boston and four to New York for conferences with bankers and economists. All this forms the basis of regular Monday morning staff conferences, headed by the board chairman.

Naturally, smaller organizations depend more on top management's own analysis. Some employ outside economic advisers, but the majority work out their own ideas.

• **Their Own Job**—One thing common to all top managements in the BUSINESS WEEK survey: They insisted that no one makes up their minds for them. That's their biggest job, as they see it. Even their own economists sometimes get short shrift.

When you want something better than metal

micarta is basic!

Consider MICARTA® as a basic material. It is lighter than aluminum. Pound for pound it has greater compressive strength than structural steel. It has a high shock resistance.

MICARTA is a solid and workable plastic which will not corrode. It resists heat and cold . . . is an ideal insulator.

MICARTA'S tough and resilient structure can be fabricated to micro-fractions of an inch. It can be machined, formed or molded easier and more economically than any metal.

Industry is finding more and more applications for MICARTA every day. This versatile material may be the answer to your metal parts problem. Westinghouse Electric Corporation, Micarta Division, Trafford, Pennsylvania. J-06446

AVIATION INDUSTRY

MICARTA is flying high . . . in pulleys, antenna masts, data cases, valve parts, instrument panels, knobs, handles, landing gear strut bearings, and structural angles and channels. In this and other industries, MICARTA as a basic material is coming to the front.

Globe Model 84, 500-mile Roller Skates

500 miles is a lot of sidewalk!

PROBABLY few children use skates long enough to accumulate such mileage. Kids grow up too fast. But the 500-mile durability engineered into Globe roller skates provides benefits every youngster can appreciate . . . more skating ease, more smoothness, more speed. And as with any product where extra thought and care in manufacture produce superior performance, a preference is built. Kids call Globe skates "The fastest in town!"

Other Globe-Union products, pioneered and mass produced at 18 Globe-Union factories contribute to the continuing progress and world leadership of the American way of life.

ROLLER SKATE DIVISION OF

GLOBE-UNION INC.

Engineered Products for Industry

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STORAGE BATTERIES • ELECTRONIC PARTS — SPARK PLUGS • CERAMICS • SKATES

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Los Angeles, Calif.
Memphis, Tenn.
Milwaukee, Wis. (4 factories)
Mineral Ridge, Ohio
Oregon City, Ore.
Philadelphia, Pa.
Reidsville, N. C.

Head of the Class

New president of Trane Co. is one of the graduates of the company's first engineering training course in 1925.

This week Trane Co., of La Crosse, Wis., had a new president—and solid proof that a company can tailor-make its own executive talent right up to the top.

Donald C. Minard, 48-year-old engineer, was elected president of the big air conditioned, heating, and ventilating company. He succeeds Reuben N. Trane who moved up to the post of board chairman.

• **Trane Trainee**—Trane's new chief operating officer is a product of the company's first postgraduate training course. He joined Trane as an engineering trainee in 1925 when the program started, becomes the first of the group to hit the top rung of the executive ladder.

Through its engineering training program, Trane Co. keeps its pipelines to management filled. Of the company's 229 field representatives, 104 are graduates of the training course. The home office employs 28 more. That's 132 ex-trainees still with the company, out of a total of 247 graduated from 1925 through 1950.

Besides Minard, several other top executives came up through the ranks, beginning with the initial training course in 1925. One of these men is now engineering vice-president, another is plant engineer, and a third is manager of steam specialties.

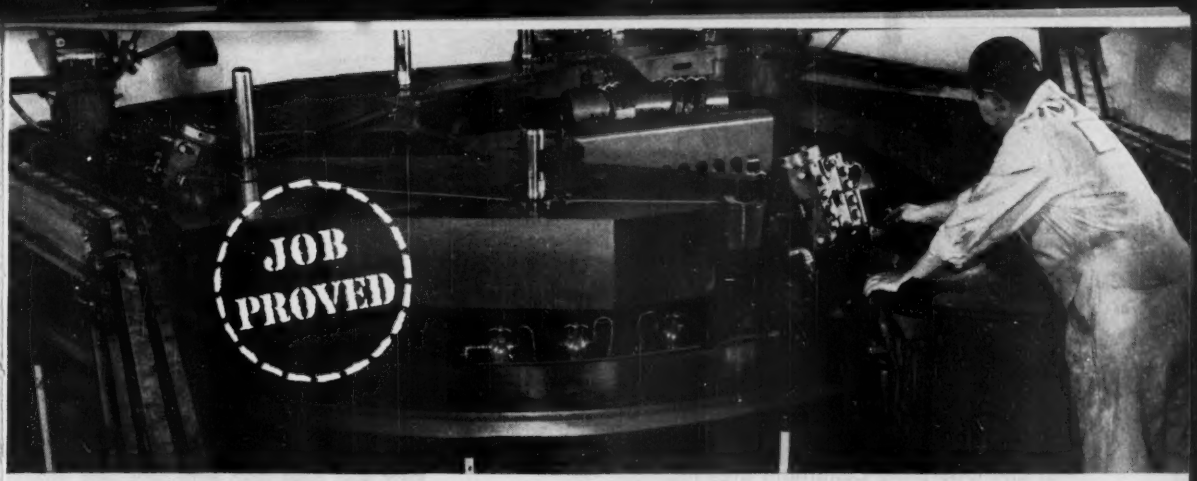
• **The Routine**—All have gone through the same routine. After college, engineers are invited to apply for admission to Trane's course. As trainees, they get $225 a month the first six months, $250 the second.

The first part of the course is mostly theory—plus engineering drawing, lectures by a professional educator and company department heads. The second six months is spent on a trial period in the field. If trainees make the grade (about 90% do), they are put on the regular payroll.

After that, management keeps a close eye on them, watches for chances to push them ahead.

Minard spent two years in the field, became manager of heating sales four years after he got out of college, was vice-president at 32. For six years he was executive vice-president.

Right now Trane has cut back the program to about eight trainees because of the Korean War. It plans to step that up next year to the normal class of 25 to 30 men.

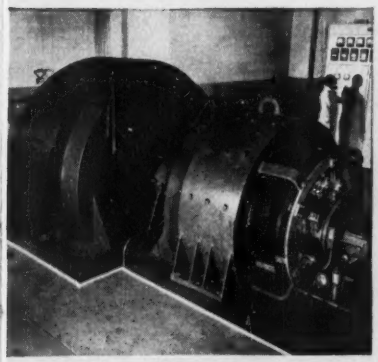


SCIENTIST at Cornell Aeronautical Laboratory gages thin oil film in wind tunnel's oil-cushioned balance system, which measures wind stresses on models to 1/100 of a pound. With the previous oil, rust particles formed, made accurate measurements nearly impossible. Frequent dismantling and cleaning were necessary at a cost of nearly $1,000 each time. Sunvis 931 Oil restored efficiency of the balance system and eliminated overhauls.

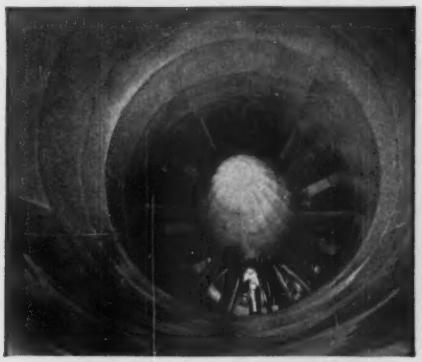
FLIGHT RESEARCH ADVANCED BY SUNVIS 931 OIL

Cornell Aeronautical Laboratory's transonic wind tunnel, valued at more than $3 million, determines the ability of planes to withstand winds up to 750 mph. Two years ago difficulties set in. In the delicate hydraulic balance system—where parts literally float on a film of oil—particles of rust were interfering with accurate measurements. Every few months the entire balance system had to be dismantled, thoroughly cleaned, then reassembled. But there is no problem today. It was solved when a Sun representative recommended Sunvis 931 Oil with "Job Proved" ability to prevent the formation of rust, corrosion, sludges, and gums.

"Job Proved" Sunvis 900 Series Oils are unsurpassed in quality. Under normal operating conditions *they are good for the life of your machinery*. For complete information, call or write your nearest Sun Office.



WINDS UP TO 750 MPH are generated by these two 12,000 hp electric motors directly connected to the main shaft. Sunvis 931 Oil lubricates and protects them, too.



TWO HIGH-SPEED propellers are also lubricated by Sunvis 931 Oil. It remains free-flowing, nonsludging, after more than two years' rigorous service.

TEST PILOT PREPARES for the take-off, confident in the knowledge that scientific laboratory pretesting has minimized the risks he runs.

SUN INDUSTRIAL PRODUCTS

SUN OIL COMPANY, PHILADELPHIA 3, PA. • SUN OIL COMPANY, LTD., TORONTO AND MONTREAL

SUNOCO

How to "COOL" hot haulage

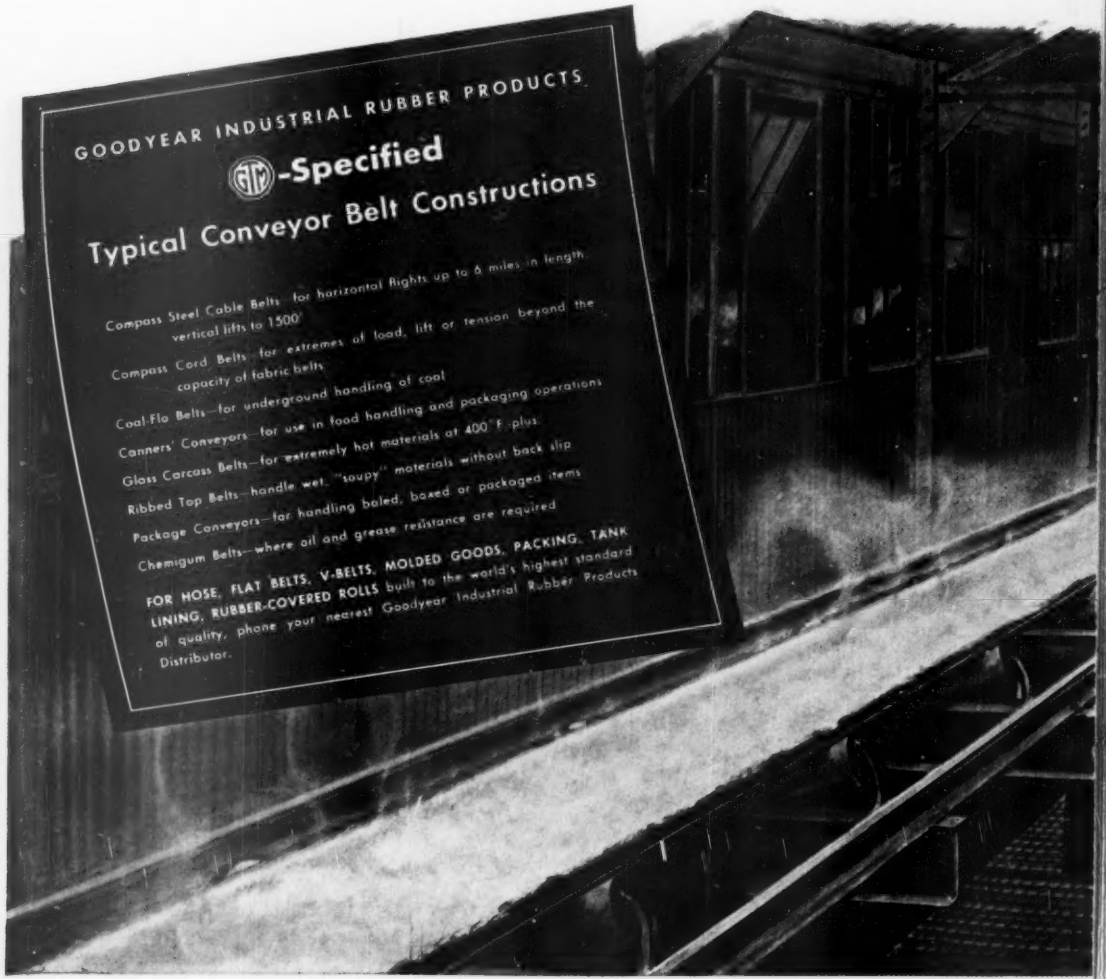
Here You Can See one of the "hottest" problems ever handled by the G.T.M.—Goodyear Technical Man. A large petroleum refinery was using ordinary conveyor belts to handle fuller's earth at temperatures ranging above 400°F. But the belts were literally "cooked" out of service in two or three months by this terrific heat. So the G.T.M. suggested a radically different replacement belt — one built with a carcass of charproof, heat-resistant glass fabric, covered with heat-withstanding rubber — especially designed by Goodyear for carrying high-temperature materials.

Heat and Operating Conditions were identical, yet Goodyear Glass Carcass Conveyor Belts outlasted 4 sets of conventional "hot belts" in the first six months. Inspection showed that the Goodyear belts still had plenty of carcass strength for many more months of service.

Other Surprising Materials can be conveyorized, too—and with equally outstanding results. In hundreds of plants from largest to smallest, and on portable rigs, the G.T.M. can show you ways to save time and money with conveyors. Indoors or out, he can choose from the widest line of conveyor belts in the industry to design a bulk cargo han-

GOOD

THE GREATEST N


GOODYEAR INDUSTRIAL RUBBER PRODUCTS
GTM-Specified
Typical Conveyor Belt Constructions
Compass Steel Cable Belts—for horizontal flights up to 6 miles in length, vertical lifts to 1500'
Compass Cord Belts—for extremes of load, lift or tension beyond the capacity of fabric belts
Coal-Flo Belts—for underground handling of coal
Canners' Conveyors—for use in food handling and packaging operations
Glass Carcass Belts—for extremely hot materials at 400° F. plus
Ribbed Top Belts—handle wet, "soupy" materials without back slip
Package Conveyors—for handling baled, boxed or packaged items
Chemigum Belts—where oil and grease resistance are required
FOR HOSE, FLAT BELTS, V-BELTS, MOLDED GOODS, PACKING, TANK LINING, RUBBER-COVERED ROLLS built to the world's highest standard of quality, phone your nearest Goodyear Industrial Rubber Products Distributor.

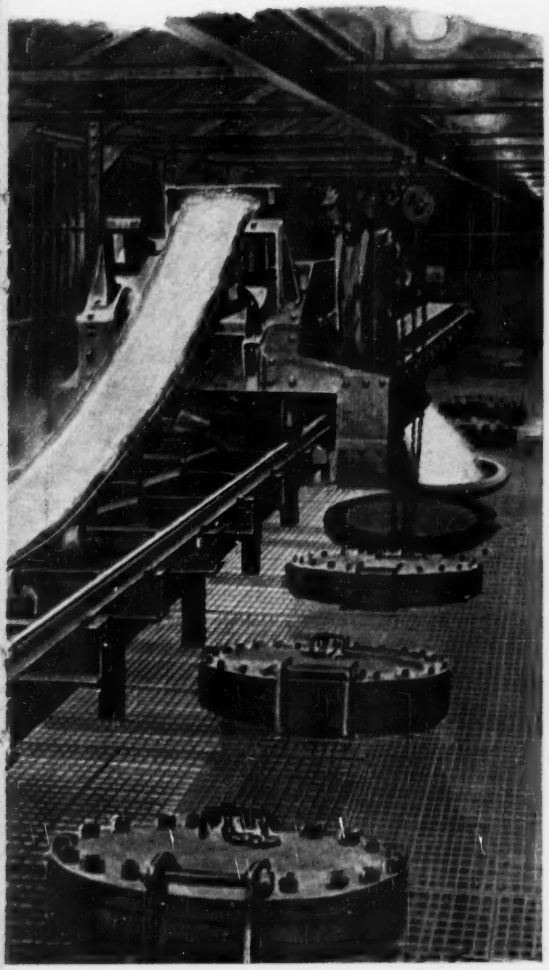
problems

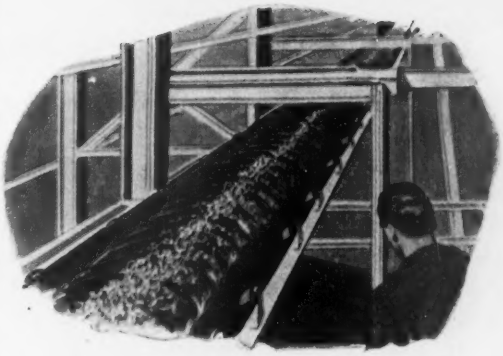
dling installation that will move more materials at lower cost and with far less trouble.

For Proof that conveyor belts can "cool" your hottest haulage problems—based on actual savings made by others in time, money and production—talk to the G.T.M. Or write Goodyear, Akron 16, Ohio.

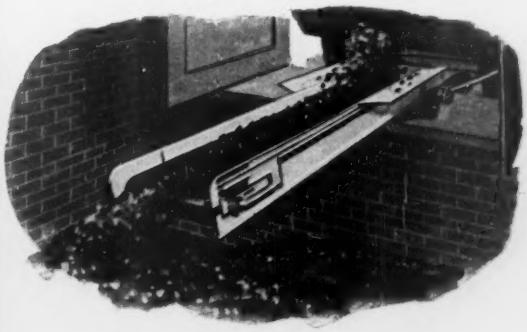
YEAR

AME IN RUBBER

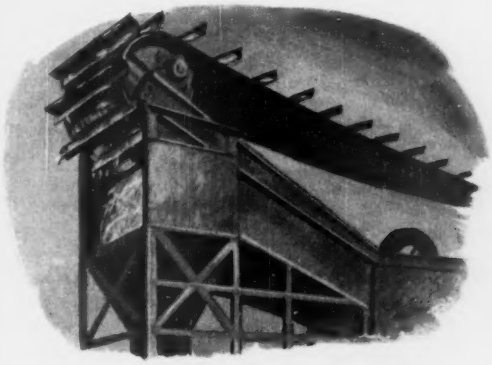




"Soupy" Materials—mixed concrete, wet iron ore and the like—ride up grades as steep as 15° without back slip, thanks to the Ribbed Top Conveyor Belt that holds the solids and drains off excess moisture.



Oily Substances like treated coal never faze Goodyear's CHEMIGUM Belts—three times as effective in oil resistance as the best previous construction. Belt shown is a portable unit for passing coal from trucks to bins.



Production Increased from 20 TPH to 35 TPH; maintenance dropped between 15 and 20 man-hours per week; operating costs went down enough to pay for 60 man-hours weekly when conveyor belts replaced old silica sand-handling installation.

Compass, Cool-Flo, Chemigum—T. M.'s The Goodyear Tire & Rubber Company, Akron, Ohio

Finest printing costs less for U.S. Gypsum . . .

. . . thanks to the revolutionary economy of *Consolidated* Enamel Papers

Two of the best reasons why you'll usually find U. S. Gypsum products and materials wherever building or remodeling is going on are a pair of colorfully edited building idea magazines called *Popular Home* and *The Business of Farming*.

Sponsored locally by U.S.G. dealers, these magazines do a powerful and unique selling job by planting the seeds of building material sales in the minds of nearly six million families with their constant flow of new remodeling ideas and building suggestions.

Naturally, U.S.G. spares nothing in making every issue attractive as possible, without extravagance. So for the millions of all-important covers, Consolidated Enamel Papers are *specified* because they provide fine enamel paper qualities at prices of 15 to 25% below those of old-style, premium-priced enamels.

The resulting economy runs to thousands of dollars a year. But the *rate* of saving is the same for every user, large or small, who has switched to Consolidated Enamels for finest results at lowest cost.

Finest enamel paper quality at lower cost is the direct result of the enameling method which Consolidated pioneered. Operating as a part of the papermaking machine, it eliminates many costly steps still required by other papermakers and produces highest quality paper, simultaneously enameled on both sides, in a single high-speed operation.

Consolidated ENAMEL PAPERS

CONSOLIDATED WATER POWER & PAPER COMPANY • Makers of Consoweld—decorative and industrial laminates
Main Offices: Wisconsin Rapids, Wisconsin • Sales Offices: 135 So. La Salle St., Chicago 3, Illinois © C. W. P. & P. Co.

READERS REPORT

Union Strength

Sirs:

Your article on the American Smelting dispute refers to the Mine, Mill & Smelter Workers as "still the strongest union in the country" (BW—Aug.4'51, p32).

This quotation was picked up for propaganda purposes by the Mine, Mill & Smelter Workers in the Aug. 13 issue of their official organ, "The Union," as follows:

"Even BUSINESS WEEK, the authoritative news weekly of big business, shows respect for us when it says in its Aug. 4 issue: 'Mine, Mill & Smelter Workers—still the strongest union in the country—is out to attract attention, too. It is threatening to strike Anaconda, Kennecott, and Phelps-Dodge.'

"Make no mistake about it. A lot of people in high places do not like us. But they do not write us off. They can't. We have been too successful."

Mine-Mill has made effective propaganda use of your article. The reference to Mine-Mill as "still the strongest union in the country" has also caused confusion in our mind and probably in the minds of other employers who have Mine-Mill as their bargaining representative.

As we know that there are unions with membership strength running close to the million figure, we are wondering on what basis you refer to Mine-Mill as the strongest.

JAMES E. BAYER
PERSONNEL DIRECTOR,
APEX SMELTING CO.,
CHICAGO, ILL.

• A copy editor's over-fast scrawl made the word "industry" appear as "country" to a linotype operator—which is, of course, dead wrong. Mine, Mill & Smelter Workers exploited this typographical error for propaganda purposes. The editor of BUSINESS WEEK is asking the union to correct the record in its newspaper.

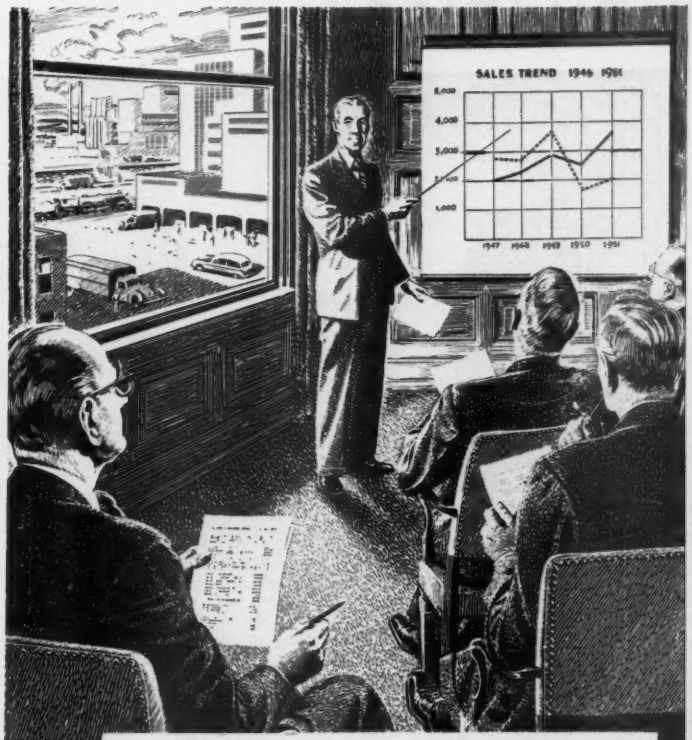
Tincome

Sirs:

In the BUSINESS WEEK editorial "What's Left" [BW—Aug.4'51,p124], you commented on the depletion of income by taxes and suggested that we need a word for what's left.

Perhaps "tincome" will serve. It is income after taxes, "t" for taxes. The syllable "tin" connotes less than genuine.

SEYMOUR PAUL
HARRISONBURG, VA.



The letterhead paper you'll find in offices where decisions count!

COCKLETONE BOND

Men who take true pride in the efficiency of their business organization are particular about the letterhead paper that represents them. Today more and more such executives find in Cockletone Bond *all* the qualities they have wanted... clear whiteness, lively crackle, the "heavy" quality feel. We invite you to examine Cockletone Bond and consider appointing it *your* business representative.

HAMMERMILL GUILD OF PRINTERS

You can obtain business printing on Hammermill paper wherever you see this shield on a print shop window. Let it be your assurance of quality printing.

SEND THIS COUPON NOW for the 1951 *Cockletone Bond* Packet of Impressive Letterheads. We'll include a sample book of *Cockletone Bond*. There's no obligation.

Hammermill Paper Company, 1455 East Lake Road, Erie 6, Pa.

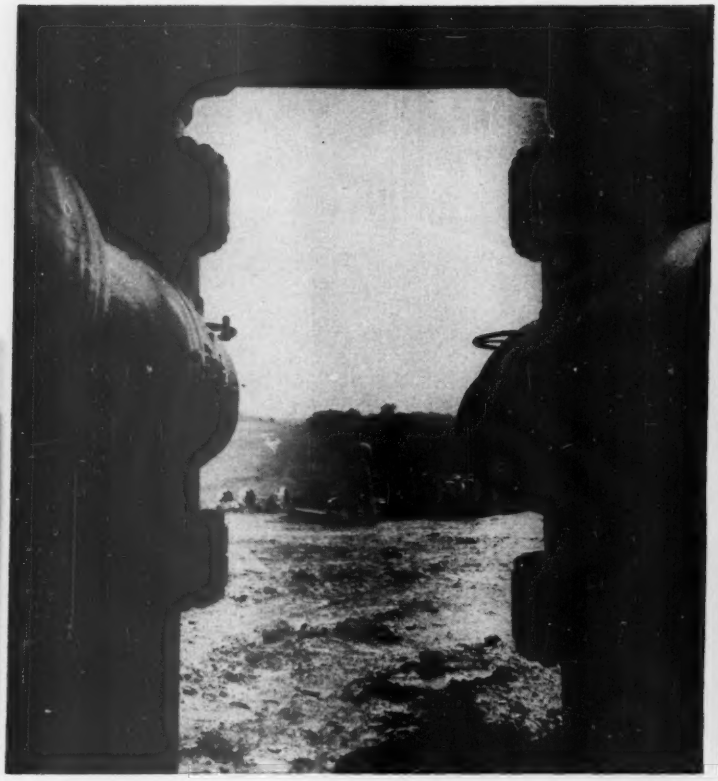
Name_____

Position_____

(Please attach to, or write on, your *business* letterhead.) BW-9-1

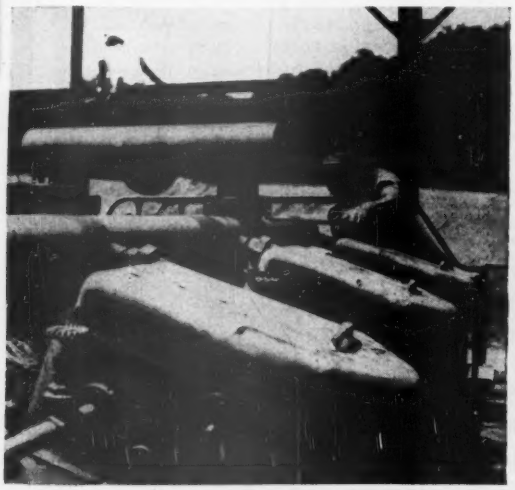
LOOK FOR THE *Cockletone* WATERMARK

UTILITIES

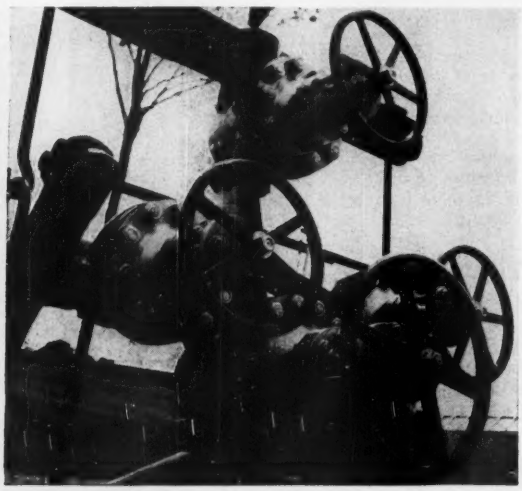


1 Texas gas will come over distant hill to be stored in the wells of this depleted gas field at Oakford, Pa. Object: to build reserve for winter demand.

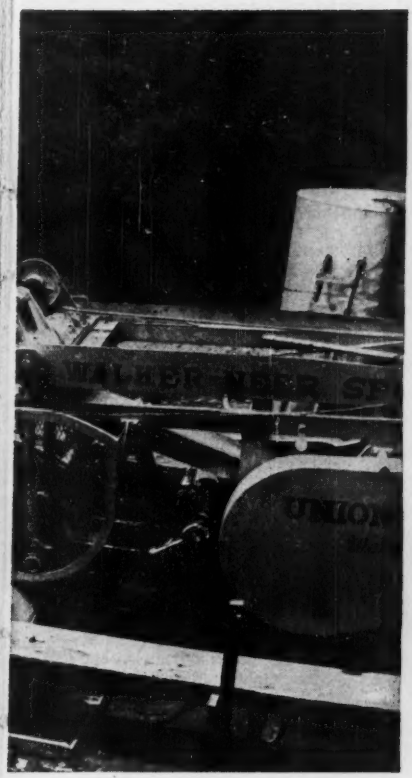
2 Before exhausted well can be used for storage—a drill rig cleans it out.



4 Workman is dwarfed by cylinders of the diesels that will regulate the flow of 105-billion cu. ft. of "imported" gas.



5 Trade calls it a Christmas tree. Riser pipe festooned with gate valves is all you see above ground at each well site.



. . . Main advantage of underground warehousing is that it's cheap.

3 Compressor station is the heart of a repressurized gas field. Giant diesels will churn up 30,000 hp. when they go into full service next year.

Warehousing Gas: Put It in the Ground

Business is so good that the natural gas industry is spending millions to find holes in the ground and fill them—with natural gas. By repressuring exhausted gas fields, gas men simultaneously solve some of their worst operating problems. They also boost revenues and improve service.

That's why the industry will spend more than $65-million this year and next to develop underground storage. Primarily, the gas distributors are cleaning up exhausted fields and using them for "warehouses." But in areas where there are no depleted fields, the search is on for other natural cavities large enough and tight enough to hold big volumes of gas.

Underground storage isn't new. The industry is rushing to it now because so many new customers want so much more gas that conventional operating practices can't meet the demand. Underground storage, where it's available, not only helps meet demand, but enables an operator to cut costs and sell much more of his product at premium prices. And it's far cheaper than other storage methods.

• **Motivation**—With the growth of long-distance pipelines to move gas from southwestern fields to northern markets, the problem of load factor became pressing. Pipelines are very expensive. It's uneconomical to build them large enough to carry as much gas as a northern distribution utility would require on its peak day. Much of that transmission capacity would be idle through most of the year.

The closer to capacity a pipeline can be operated day in and day out, the lower will be the unit cost of transmission. That means that nonresidential customers must be found who will take gas during months when householders don't want it, but who'll get off the line during cold weather.

Such customers aren't too difficult to find. Industrials and electric utilities discovered that by installing alternate-fuel equipment on their boilers they could play the market, switching to and from oil, gas, and coal as prices or supply of each varied.

• **Economic Waste?**—That's less than a perfect solution, though. While the United States has a lot of proven gas reserves, the supply isn't limitless. Conservation-minded people, particularly the regulatory authorities, question the wisdom of burning a premium, irreplaceable fuel under boilers when coal would serve as well.

Conservationists don't have to push that argument very hard. The gas operators themselves are painfully aware that there is no percentage in selling gas for, say, 17¢ per 1,000 cu. ft. on an

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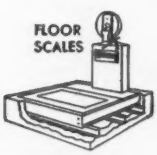

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". . . And natural gas has about twice the heat value of manufactured gas . . ."

GAS STORAGE starts on p. 71

interruptible basis to industrial customers when they can get 35¢ on a firm contract.

The obvious answer is storage. A large volume of stored gas enables a small line to do the same job as a big line, while holding down capital costs. Storage boosts load factor. You operate the line steadily. What isn't used on arrival is cached away. When residential space-heating demands pile in, the gas comes out of the ground for sale at premium prices.

By consolidating the capabilities of the pipeline and the storage field, distribution systems are less likely to reach the point where load has to be curtailed.

• **Other Systems**—Underground storage, of course, isn't the only way gas utilities can carry peak loads. Numerous distribution systems, which originally sold manufactured gas and which have since switched to natural gas, retain their gas plants, operating them to meet peak loads.

But manufactured gas is expensive. Oil and coal costs have risen beyond the cost of natural gas on a Btu. basis. And natural gas has about twice the heat value of manufactured gas.

Gas can also be stored above ground —in gas holders, or in lengths of large-diameter pipe, or by "line packing" (raising gas pressure overnight in the delivery end of a pipeline so there's more there to be taken out next day).

• **They're Expensive**—Capital costs of above-ground storage run high: $50 to $100 per 1,000 cu. ft. for bottle holders; perhaps $200 for water-seal holders; about $70 for pipe holders; about $300 for high-pressure holders. Annual costs on such equipment boost the bill still higher.

Underground storage, conversely, can be had at costs reported to range from 2¢ to 53¢ per 1,000 cu. ft. Obviously, the disparity between these costs favors the underground. At $200 per 1,000 cu. ft., you just can't afford to build as much storage as you could use profitably.

Truly useful underground storage sites, of course, aren't found everywhere. They must be able to take gas rapidly and yield it at a high rate. Ideally, they should be able to hold about 30% of a system's annual firm sales. With that kind of capacity, you can maintain a high annual load factor without manufacturing any gas and without dumping any through interruptible sales.

• **Short Haul**—The storage field should be near the load centers and near ex-

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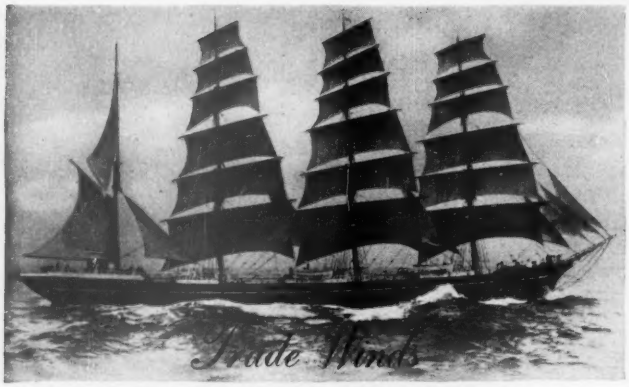

In 1792, when **James Drake** founded his mercantile company in Cuba, international trade faced the many hazards of nature. Today's man-made hazards are different, but far more complex – with names like "import license", "currency restriction" and "sight draft". The requirements of overseas markets today are constantly changing, too, so that export, more than ever, needs the SERVICE of SPECIALISTS.

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isting transmission lines. The farther from each, the more it will cost to put the field in service.

With gas demands as high as they are and still expanding, a storage field should hold large volumes, although even small fields can be tremendously useful.

Finally, a good storage field shouldn't require too great a "cushion"—the amount of gas that's always left in the field to insure that it operates properly.

• **The Big Hole**—Standout project of those going into service this year is that at Oakford, Pa., near Pittsburgh (pictures, page 70). This $40-million project will use a depleted field and its existing wells. When complete in a couple of years, it will store 105-billion cu. ft., of which 45-billion will be "cushion." The 60-billion cu. ft. of usable storage will be available at a maximum rate of 400-million cu. ft. daily.

Ultimately, this project will have 30,000 hp. of compressor capacity to shove the gas into the ground and draw it out again at a controlled rate of flow.

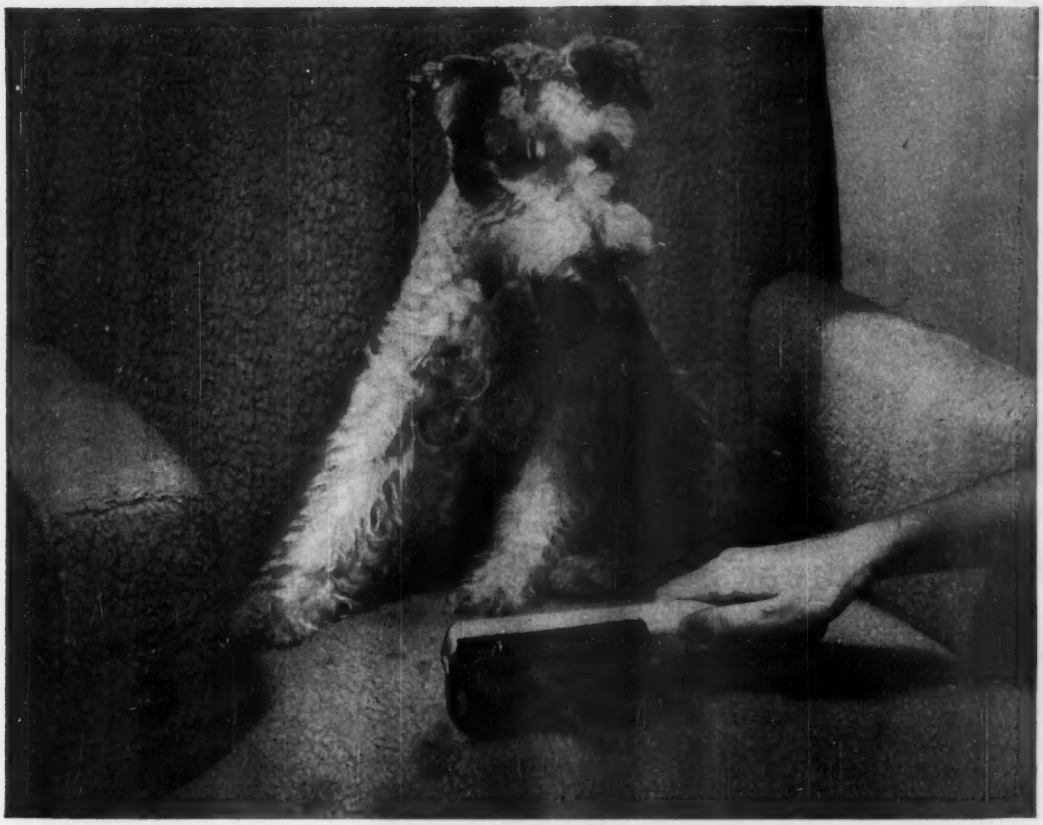
Consolidated Natural Gas Co. and Texas Eastern Transmission Corp. are jointly financing the work. Texas Eastern will funnel gas from the Southwest into the vast reservoirs, while New York State Natural Gas Co., a Consolidated property, will feed it from Pennsylvania fields.

• **How They'll Use It**—At the approach of peak demands, Texas Eastern will draw on the reserve for the New England system to be served by Algonquin Gas Transmission Corp. and for other loads. Consolidated will draw gas for three of its operating companies—New York State, Peoples (Pittsburgh), and East Ohio Gas (Cleveland).

New York State Natural and East Ohio are also cooperating on a 13-billion-cu. ft. storage project at South Bend, northeast of Pittsburgh. Maximum delivery of the $9-million project will be 264-million cu. ft. daily.

• **Salt Water Dome**—In Chicago, Peoples Gas Light & Coke Co. is seeking regulatory permission for a storage project in a natural reservoir that never has held gas. Known as the "Herscher Dome," this sandstone formation, now filled with salt water, lies 1,600 ft. below the surface at Herscher, Ill.

Engineers estimate that the 15,000-acre field could store more than 90-billion cu. ft. of usable gas. It would be charged under pressure great enough to displace the salt water, through wells drilled in the impervious rocks and shale that lie above the dome. On the basis of geological investigations that have been going on about a year, the project would cost at least $25-million.



How to whisk away a pet peeve

Lint, dust and even dog hair do a quick disappearing act when this new kind of brush takes over. It's made of wool fibers firmly bonded with neoprene. And it makes a clean sweep of even the most stubborn dirt on clothing and furniture.

In designing the brush, a latex bonding agent was needed that would withstand residual oils in the wool. That's why the maker used Du Pont neoprene latex. And, too, neoprene withstands abrasion and contact with soap, solvents and grease. So the brush can be used for the dirtiest clean-up jobs, over and over again.

Neoprene bonded fibers are rapidly finding more and more interesting applications. Carpet underlay with a neoprene latex coating doesn't fray, needs no edge binding and can be easily cleaned. Used as packing for delicate instruments, neoprene bonded fibers absorb shock and are little affected by oil and grease. Such material is also used as upholstery padding for furniture and automobile seats, for mattresses, and for crash pads in planes, tanks, and other military equipment.

For more information about neoprene, write for our booklet "Design for Success with Neoprene." It describes neoprene's properties and many of its important uses. E. I. du Pont de Nemours & Co. (Inc.), Rubber Chemicals Division, Wilmington 98, Delaware.

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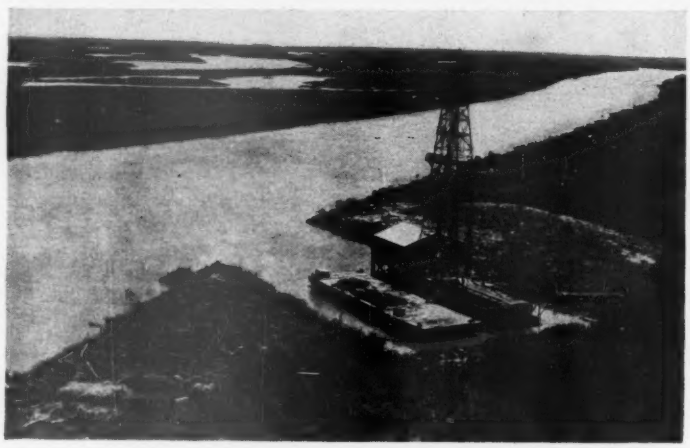
REPORTERS throng around James Boyd, J. H. Whitney, L. M. Williams when . . .

Freeport Breaks News of Big . . .



. . . Sulfur Find in a Marshland

About 100 miles southeast of New Orleans, in the Mississippi River delta, lies a bleak marshland badly misnamed Garden Island Bay. To the layman, this is not a place that would seem to hold much of value for mankind or his civilization.

But last week this dismal swampland was the focal point of some news that would affect almost every American industry. At a special press conference called for the occasion, Freeport Sulphur Co. announced that a huge new deposit of 99½% pure sulfur had been discovered there. Consisting of native crude sulfur, or brimstone, this is the biggest deposit of its kind found anywhere in the world in nearly 20 years. And it is the easiest and cheapest kind to produce.

• **Big Stir**—Normally such an announcement would cause scarcely more than a ripple of interest outside the sulfur industry itself. What brings on all the excitement right now is the fact that sulfur, an essential raw material, has been in seriously short supply. Used in the manufacture of everything from automobiles to insecticides, sulfur has no substitute. Yet consumption is running at the rate of approximately 1-million long tons per year more than production.

Freeport was well aware of the importance of its news. It was given out at the press conference by the company's two top men—John Hay Whitney, chairman of the board; and Langbourne M. Williams, Jr., president. Also on hand was Dr. James Boyd, director of the U. S. Bureau of Mines, who had come back from his vacation for the occasion. Concrete evidence that Freeport was not exaggerating its find came within two days of the announcement—Freeport stock jumped from about 100 to 117.

• **Half the Deficit**—Freeport says that it will build a plant at Garden Island Bay that will cost between $10-million and $15-million. Once it starts operating (two years from now), the company figures it will turn out 500,000 long tons a year—half the entire present deficit. Dr. Boyd pointed out that that would mean the end of the shortage by the end of 1953. The reason is that by that time new plants to get sulfur from other sources (such as from iron pyrites and waste gases) will be producing the other 500,000 tons.

I. Behind the Shortage

The sulfur shortage is unusual for two reasons: (1) It has become acute fairly recently; and (2) there are more potential sources of sulfur than of most other essential commodities. In one sense, the shortage has been developing for some years—that is, consumption has been exceeding yearly production. But it wasn't until the turn of the year that the industry became alarmed. By then, above-ground stocks had dwindled to below 2.8-million tons (BW—Jan.20'51, p67).

• **Growing Use**—One cause of the shortage has been a growing market for old applications of sulfur. In other words, the use of sulfur has actually kept pace with industrial expansion, particularly in the metallurgical, chemical, and fertilizer fields, but sulfur production hasn't.

Sulfur is essential to a wide variety of products used in daily life. Among them: steel, gasoline, paper, chemical products ranging from rayon to explosives, dyes, rubber, paint, food preservatives, and many others.

• **Foreign Needs**—But a more immediate cause of shortage has been the fact that the sulfur industry has had to meet new demands elsewhere. Foreign countries have been suffering severe hardship from a sulfur shortage themselves. As a result, the U. S. has been shipping abroad a good slice of its own dwindling supply on allocation.

II. The Discovery

Like all mining companies, the sulfur industry always keeps looking constantly for new deposits. Since the

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Suddenly there's action and your cameras, carefully focused and ready, begin to record the colorful story of your shooting holiday. But long before that thrilling moment Gas performed many of the tasks which make your trip possible.

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Then you have to travel—long distances over land and water, then by air to the safari assembly point. In all modern forms of transportation, Gas has always been a preferred fuel for heat-treating, metal-working, fabricating. And, as newer types of equipment are developed, Gas fulfills an expanding role in brazing, laminating, stress-relieving—the many operations where heat is required for processing.

Your food and shelter, weighty problems however you looked at them, required a lot of careful study. But Gas had already performed many of the tasks to make your job easier. In processing such as dehydrating, pre-cooking, concentrating, sterilizing, baking, Gas is universally used to prepare the foods you need. And for shelter, too, Gas is the preferred textile-processing fuel, is important in the manufacture of rubberized fabrics, is essential to most production-line heating operations.

But a safari is specialized and you may never need those uncounted items of operational equipment in which Gas supplies the heat for processing, such as chemical exterminators, protective arms and ammunition, radio and sound apparatus. There is a place for Gas, though,

in your own production lines wherever you have a process requiring heat. The applications of Gas in industry are so diversified that you'll find it worthwhile to investigate this essential fuel for your own production heating operations.

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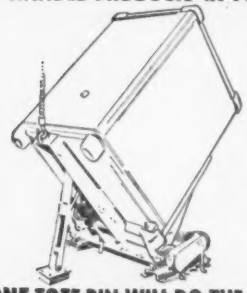

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shortage became acute last winter, Freeport has stepped up its search for new deposits of brimstone. But it knew along with everybody else that the odds were tremendous against their turning up a find of this size within such a short time.

• **Texas Co. Find**—Actually, the discovery was not made by Freeport, but by the Texas Co. Texas was producing oil from the flanks of the formation and was exploring for more when it ran across sulfur. Before that happened, Freeport figured that there might also be sulfur there, so it had made a deal with Texas for the rights to any such discovery.

A key man in this deal was Charles A. Wight (cover), 52, chairman of the executive committee of Freeport. His job was to work out the details of the negotiations with the Texas Co. early this year for the rights. Under the terms of the leasing arrangement, Freeport will pay Texas Co. half the profits it derives from the new sulfur deposit.

• **Financial Man**—Wight is not a sulfur man, but he has had long experience in financial operations of this kind. A graduate of Yale University, he was associated with the Bankers Trust Co. for many years. From 1931 to 1935, he was a vice-president in London, and held the same job in New York from 1936 to 1948.

In April, 1948, Wight ended his long service with the bank to take over the job of chairman of the executive committee at Freeport, where he had previously been made a member of the board of directors. He is also a director of several other companies, including Grumman Aircraft Engineering Corp. and Salvage Process Corp. He is a trustee of Lenox Hill Hospital and Brick Presbyterian Church, both in New York City.

III. Company Status

The new discovery, of which Wight's negotiations were the forerunner, will considerably change Freeport's status. Right now it is turning out about 1.5-million tons of sulfur a year, or about one-fourth the U. S. production. The new deposit will boost that amount to nearly one-third the production. But Freeport will still be second to Texas Gulf Sulphur Co., which now produces about half the total sulfur output.

• **Close to Home**—Oddly enough, the new dome lies only about 50 miles away from Freeport's biggest functioning deposit—that at Grande Ecaille, La. This was discovered in 1933, turns out now about 1.3-million tons a year. For that reason, Freeport had a strong hunch that the nearby Texas Co. oil discovery might mean another big deposit. Also, it has rights on four other potential sulfur domes in the area.

From the standpoint of the current shortage, there is one standout piece of luck about the Garden Island Bay discovery—that a sulfur company has the rights to it. It means that production will be under way a lot sooner than if, say, a steel company made the discovery. The reason is obvious: The sulfur people have the knowhow and ability to mine sulfur, just as steel people have it for the intricacies of making steel.

• **New Ideas**—Freeport has always been noted for a progressive approach to sulfur producing, anyway. Founded in 1913, it was the first company to mine sulfur in Texas. It was also the first to follow the Frasch process. This method involves pumping hot water into the deposit underground to melt the sulfur, then pumping it to the surface with compressed air. It is solidified, by cooling, in large storage vats. This was a radical departure from normal mining methods and has proved highly successful.

But no one except Freeport thought the Frasch method could be used at Grande Ecaille. This dome is in the same kind of swampland as the new one, and the whole industry scoffed when Freeport said it was going to try the hot-water method. It couldn't be done in a swamp, said the industry. So Freeport did it.

• **Other Fields**—Freeport has not stuck entirely to sulfur. During the course of its explorations of the earth's surface for new deposits, it has run across a couple of other things that it felt were worth sinking money into. One of these was some manganese mines in Cuba, which it worked during World War II until they ran out. Another is nickel, also in Cuba, from whose production it is still getting royalties. And recently it has got into oil and gas in a small way. Freeport entered most of these areas through the back door—while carrying on its endless search for sulfur.

• **Payoff**—The new discovery has proved to Freeport that the endless search can really pay off. Dr. Boyd summed up the broad implications of it from the point of view of the Bureau of Mines this way: "The 500,000 tons planned for the new Freeport mine now increases the expected new production of sulfur to well over the expected deficit. It will take considerable time, of course, for all the new output to come in and for supply to overtake demand.

"However, if the projects are carried out as planned, and if production from existing sources holds up . . . sufficient capacity should be available to permit present producing units to return to a more economic level of production, as some are now operating at a level inconsistent with good conservation practices."

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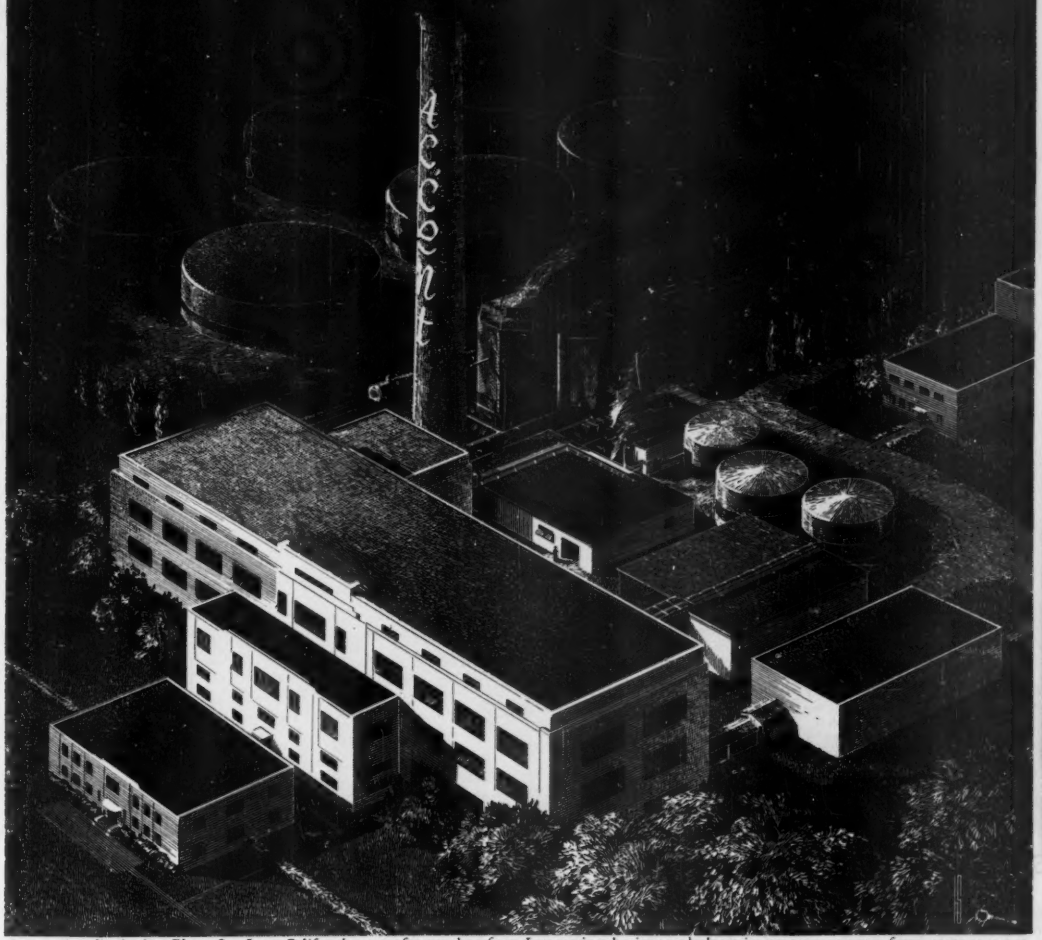

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SALT LAKE CITY centers around statue of Brigham Young at main corner. Statue has its back to Mormon Temple, left rear.

Brigham Young Wouldn't Recognize It

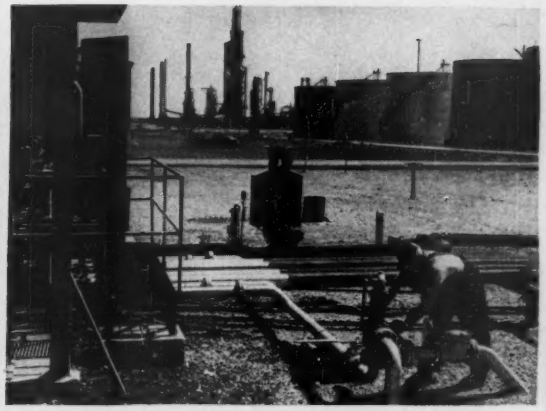
Stand at the corner of Main and South Temple Streets, the business and religious heart of Salt Lake City, and take a look around. You see a conservative, mellowed, middle-class city, walled in by mountains that look near enough to touch.

As you stand there, perhaps yawning at the leisurely pace of pedestrians and the absence of bar and grill signs, you'll never suspect that this sober little city is going through a revolution—a 10-year upsurge of industry that is unprecedented in Utah history.

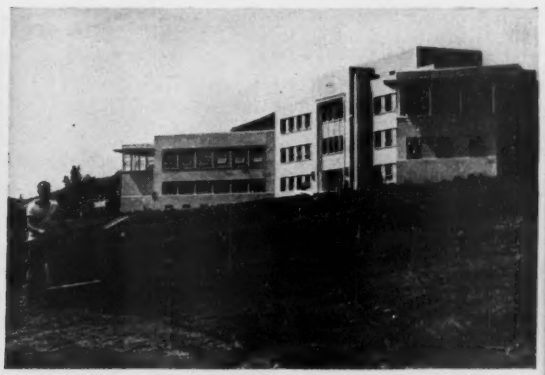
• **No Rockets**—Salt Lake City takes everything in stride. It has had many ups—and some downs—before. Its 22% population growth between 1940 and 1950 would have many cities beating chamber of commerce drums and setting off rockets. Salt Lakers think it's very nice and let it go at that.

Partly it's a matter of temperament. Salt Lakers, 63% members of the Mormon church (Church of Jesus Christ of Latter-Day Saints), put a premium on thrift, industriousness, temperance. They aren't sensation-lovers.

Partly, too, it's the fact that there's so much room for Utah to grow. Effects of a change are dispersed over a vast area. To drive through Utah you'd never realize that only eight other states



HEAVY INDUSTRY is changing the Utah region. In World War II, Geneva Steel plant, left, blazed trail for 71 steel-fabricators. Refinery of Standard of Calif., right, followed first Utah oil well in 1948.



RAPID GROWTH results, has spurred building of new homes, left, and hospitals, right, on choice hillside sites. Shriners' children's home is one of three hospitals built in 1951. Patients come from all over Mountain West.

PLEASANT LIVING still goes on for unexcited Salt Lakers. They float high at Great Salt Lake, left, with Garfield copper smelter in background, and play in city's 27 parks. Picnic ground at right is behind State Capitol.

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Corrosion resulting from the action of sea water can be controlled with a cathodic protection system of Dowell magnesium anodes. These low-cost, expendable anodes are attached to hulls of ships or suspended from underwater steel structures. No outside power is required. Such a simple system of corrosion control is easily installed. Results show that it pays off!

For example, Dowell magnesium anodes were installed on a marine tractor operating in a Gulf Coast harbor. Five months after installation, this marine tractor was dry-docked for inspection. Highly satisfactory results were indicated because there was no significant blistering of the anti-fouling paint. Coating breaks, caused by abrasion, showed no signs of corrosion.

Dowell magnesium anodes are finding wide acceptance for the control of corrosion on pipelines, distribution systems, tank bottoms, piers and other buried or underwater metal structures.

Contact the nearest Dowell office for complete information. Or write to Tulsa, Dept. 508 for free booklet "Dowell Magnesium Anodes" and specific technical information.

DOWELL
INCORPORATED
TULSA 3, OKLAHOMA

80 strategically located offices ready to serve all industry with—

- **Maintenance cleaning service for industrial heat exchange equipment.**
- **Chemical services for oil, gas and water wells.**
- **Magnesium anodes for corrosion control.**

DOWELL
A service subsidiary of The Dow Chemical Company

". . . in population among the also-rans . . ."

SALT LAKE CITY starts on p. 80

exceeded its growth from the 1940 to the 1950 census (25.2%). The growth just doesn't stick out.

• **Wide Influence**—In a list of cities ranked by population, Salt Lake City is down among the also-rans, 51st in the list. With only 182,821 residents, it is smaller than Worcester, Mass., and Norfolk, Va. But it's a big frog in a very wide puddle. It has no rival for size in a belt of the U. S. more than 1,000 mi. wide, all the way from Canada to Mexico. Its nearest city neighbors are Denver, more than 500 mi. to the east, and San Francisco, 750 mi. west.

The Salt Lake City market area is reckoned at roughly five times the size of New York State. True, there aren't many people in this region of deserts and mountains. But area alone gives it a high potential, as the population growth of 1940-1950 testifies.

I. Industrial Revolution

In Brigham Young's day, a century ago, farming was the mainstay of the Mormon settlers. Mining next entered the economic picture. Though Young and his immediate successors frowned on mineral development, there was just too much wealth in those hills for the miners to be turned away.

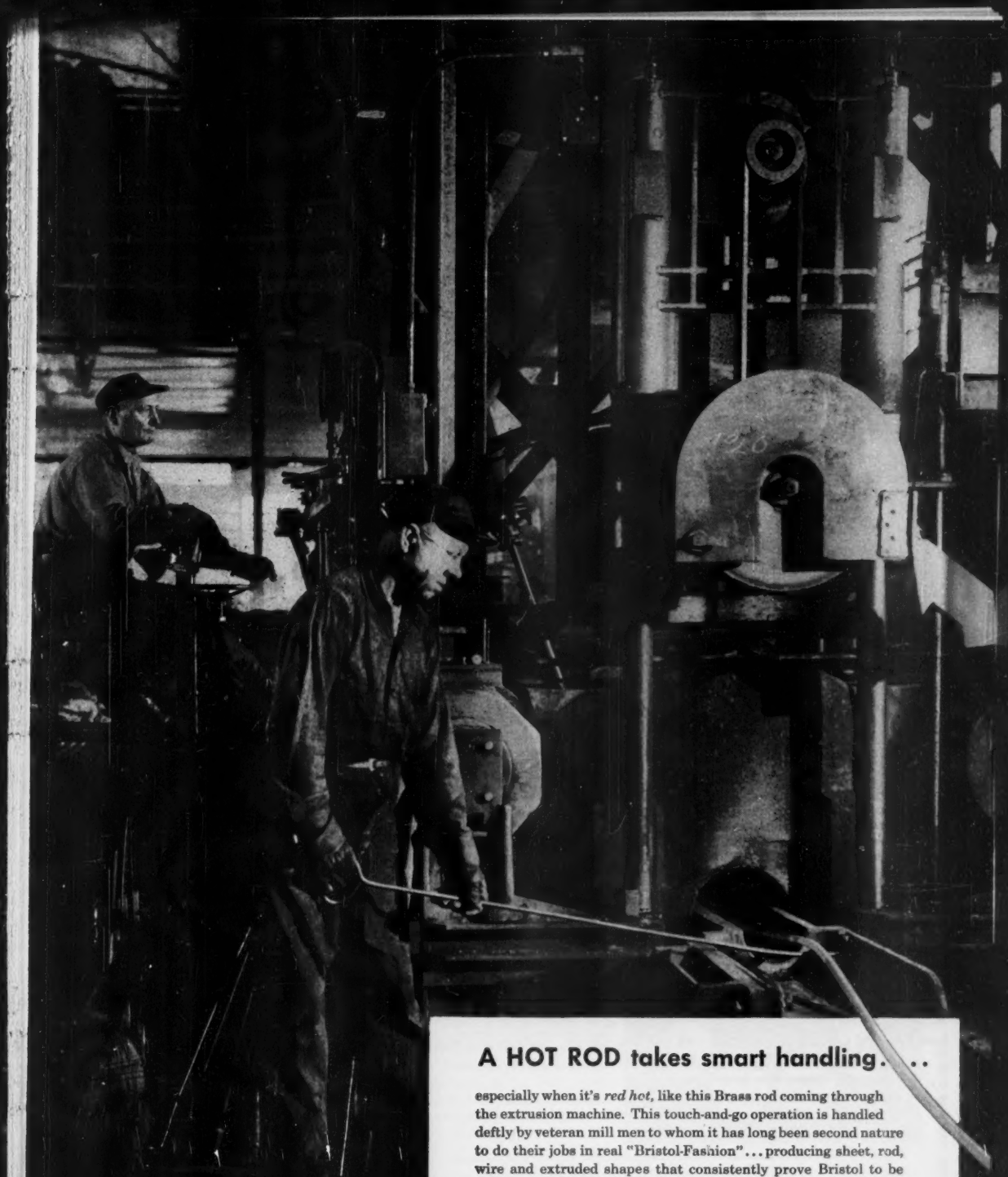
Now industry has become the third string to Utah's bow.

The spark for Utah's industrial revolution was the building of the Geneva steel mill in 1940, on farmland 35 miles south of Salt Lake City. Other industries followed. In one 18-month span, Utah's assessed valuation gained more than it had in the previous 68 years.

During World War II, Utah also had an influx of military installations. The same isolation that led Brigham Young to choose the Salt Lake basin as a sanctuary for his persecuted followers made the area attractive as a western arsenal headquarters.

• **Postwar Pickup**—Instead of fading away after the war, the industrial and military development picked up. From 1946 to 1950 more than $130-million of new private capital was invested in Utah manufacturing. Today there are 573 manufacturing plants within a 25-mile radius of Salt Lake City.

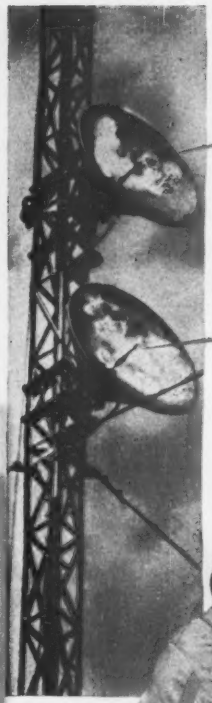
Geneva Steel Corp., subsidiary of U.S. Steel Corp., is now the center of a complex including 71 steel-fabricating companies. Last year Utah ranked 11th among the states as a steelmaker. Geneva is expanding, too. Built for a capacity of 1.5-million tons of steel ingots a year, it is now adding capacity for



A HOT ROD takes smart handling . . .

especially when it's *red hot*, like this Brass rod coming through the extrusion machine. This touch-and-go operation is handled deftly by veteran mill men to whom it has long been second nature to do their jobs in real "Bristol-Fashion"... producing sheet, rod, wire and extruded shapes that consistently prove Bristol to be "Brass at its Best." The Bristol Brass Corporation, since 1850 in Bristol, Conn. Offices or warehouses in Boston, Chicago, Cleveland, Dayton, Detroit, Los Angeles, Milwaukee, New York, Philadelphia, Pittsburgh, Providence, Rochester.

"Bristol-Fashion" means Brass at its Best



"RCA MICROWAVE SAVED US $36,500... and cut out line maintenance, too!"

...says Chief Engineer Gladman Upchurch, Arkansas Game and Fish Commission.

Chief Engineer Upchurch (right) gives message to operator for general broadcast to all game wardens via Arkansas's RCA Microwave relay and 2-way radio system.

Twenty-five miles of costly pole-line construction, easements, and maintenance were eliminated by an RCA microwave link in the 2-way radio system recently set up by the Arkansas Game and Fish Commission.

Radio signals are beamed from capitol dome 15 air miles by RCA Microwave to a transmitter and relay station atop Chenault Mountain. From here state-wide FM 2-way radio contact is maintained with several outlying fixed stations and with 175 mobile stations in autos, trucks, and jeeps of far-ranging game wardens . . . *all at a saving of $36,500 and with no pole-line maintenance.*

Are you missing a bet on RCA Microwave? Do *you* have a problem maintaining communications through wind, sleet, and falling trees? RCA Microwave is the answer. Eliminates pole lines, easements, line maintenance, storm outages. Costs less per mile for comparable capacity. Signals travel by radio beam, span up to 35 miles. Repeater stations relay signal over mountains and valleys, operate unattended for months. System has channels for voice, supervisory control, teleprinter, 2-way radio, other circuits. So *dependable* it's used by telegraph and power companies, highway commissions, others. Get full story. Mail coupon . . . *today!*

RCA ENGINEERING PRODUCTS
Dept. 26-U, Camden, New Jersey

Please send me, without obligation, full story on how new RCA Microwave can give efficient, all-weather communications without pole lines, easements, or line maintenance.

Name_____

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Firm_____

Address_____

RCA RADIO CORPORATION of AMERICA

". . . the nation's greatest concentration of nonferrous mining . . ."

SALT LAKE CITY starts on p. 80

100,000 tons of hot-rolled sheets annually.

• **Oil Spurt**—Oil is a brand-new industry for Utah. The first producing well was brought in just three years ago. Now the state has 38 producing wells. In those three years, the oil business alone has dropped $50-million into the economy of the Salt Lake City region.

Since 1948, Standard Oil of Calif. has spent $34-million through its subsidiary Salt Lake Pipeline Co. and Salt Lake Refining Co. It has built pipelines from Salt Lake City to Rangely, Colo., and from Salt Lake to Pasco, Wash., along with a refinery north of Salt Lake City. Standard expects to spend $5-million to $7-million on exploration during 1951. If expected new reserves pan out, Standard will double the capacity of its refinery and may build a new pipeline to the West Coast.

Phillips Petroleum Co. is currently adding a $10-million refinery to its Utah plant. Utah Oil Refining Co., on the scene for more than 40 years, spent $2-million on expansion last year.

II. Mining—Old Standby

Steel and oil are newcomers to the Utah landscape. The old standby, and still a big star, is the nonferrous metal industry. Within a 30-mile radius of Salt Lake City is the nation's greatest concentration of nonferrous mining, milling, smelting, and refining.

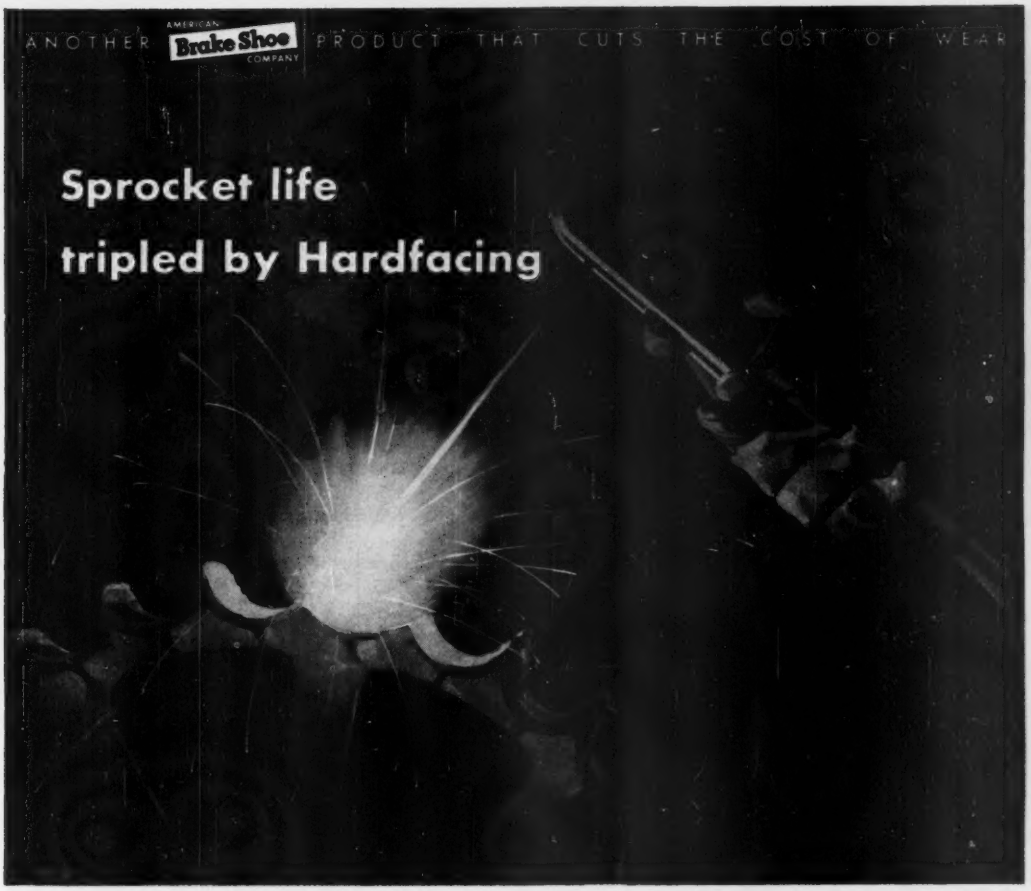
The hub of this industry is Kennecott Copper Co.'s open-pit mine at Bingham, largest in the country. This gaping pit produces 30% of the country's copper. It's also our leading domestic source of molybdenum. Gold is another byproduct.

Biggest development in Utah copper is Kennecott's new $16-million electrolytic copper refinery at Garfield (BW—Nov.11'50,p48). Kennecott concentrates its ore and refines its copper. Smelting, the intermediate step, is handled by American Smelting & Refining Co.'s Garfield smelter, the country's biggest.

• **Military Bases**—On the military side, too, Utah is still gaining. Some World War II installations were temporary.

But there are new, permanent military centers in the area: the $24-million Dugway proving grounds for secret Army tests near the famous Salt Flats, an $8-million veterans' hospital in Salt Lake City, the Atomic Energy Commission's Arco Proving Grounds in Idaho; Clearfield Naval Supply Base, Ogden

ANOTHER AMERICAN Brake Shoe COMPANY PRODUCT THAT CUTS THE COST OF WEAR



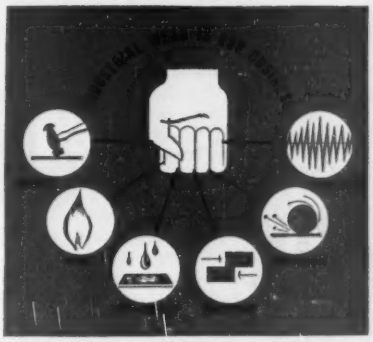
Repair instead of replace . . . on the job . . . at less cost

The sprockets that give 20-ton bulldozers their herculean push take a hard fisted beating as they slam into the track that moves the monster. Add to this destructive action, the gouging and cutting of sharp edged sand and stone, and you have wear at its worst.

Hardfacing . . . the laying of a hard, tough, wear-resistant metal surface on a softer base metal, by gas or arc welding . . . is a cost-cutting answer to this wear problem. It makes parts hard, yet tough, to resist the wear of impact, abrasion, corrosion and heat.

Amscoating is a method of hardfacing that often reclaims such worn out parts for less than original cost. It lengthens the life of old or new parts often beyond original service. Amscoating can be done in the field and on the job quickly and cheaply by any competent welder.

Amscoating is based on the know-how derived from thousands of practical field applications, with directly traceable savings in lower maintenance and replacement costs, and fewer shutdowns. Our Amsco engineers will welcome the opportunity to apply their experience to your hardfacing problem. Write Department A for literature about Amsco Welding Products.



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Lustig's, Inc.
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The development of the "Automatic 400" **Ceiling Sprinkler** discounts the adage that you can't have beauty and fire protection too. For here is a sprinkler head that is designed to blend perfectly with the appointments of the most tastefully designed interior—finished in bronze or chrome, bright or satin, it projects less than one inch below the ceiling surface. Yet, regardless of its beauty, it's ready, willing and able to automatically extinguish fire whenever called upon to do so.

You'll find the "Automatic 400" **Ceiling Sprinkler** installed in the most distinctively decorated offices, stores, restaurants and public buildings. No longer is it necessary to sacrifice "eye appeal" in order to have fire protection that offers both safety and savings.

Contact our nearest "Automatic Sprinkler" representative for engineering counsel, surveys and estimates. They are available to you without obligation. Ask for free literature.

"Automatic 400" Ceiling Sprinkler
"Automatic" Pendant Sprinkler

"AUTOMATIC" SPRINKLER CORPORATION OF AMERICA
YOUNGSTOWN 1, OHIO

"Automatic" Sprinkler
FIRST IN FIRE PROTECTION
DEVELOPMENT . ENGINEERING MANUFACTURE . INSTALLATION
OFFICES IN PRINCIPAL CITIES OF NORTH AND SOUTH AMERICA

Arsenal, Deseret Chemical Depot, Tooele Ordnance Depot.

III. The Mormon Influence

Salt Lake City shows the mark of 100 years of Mormon influence. Even with the big population gain of the past decade, the ratio of Mormons to total population remains approximately the same.

Followers of the church's teaching abstain from alcohol, tobacco, coffee, and tea. To the visitor, Salt Lake City seems over-sober, even stuffy. There are no night clubs or saloons; you can't buy a drink except in private clubs, though state-operated package stores sell liquor by the bottle.

Salt Lakers, however, think their city is lively enough. The people are movie-lovers, and the city has 30 movie houses.

• **Church Empire**—In the generation of Brigham Young, the Mormon church controlled all phases of Salt Lake City life. This is no longer true. But the church still controls a big slice of business.

The Saints today own or control such enterprises as ZCMI, largest department store between Denver and San Francisco, and its wholesale distributing company (BW—Jun.23'51,p128); The Deseret News, largest daily evening newspaper in the Mountain West; Utah-Idaho Sugar Co., king of the vast sugar-beet industry; the Deseret Book Store, largest in the city; three hotels, two banks, a life insurance company, the chief radio station, and many schools and hospitals.

• **Tolerance**—Present Latter-Day Saints are tolerant of outsiders, however. The church-controlled Hotel Utah, best in the city, for example, is managed by a non-Mormon—in Utah language, a gentile. Many department editors on the staff of The Deseret News are gentiles.

Mormons seldom follow a definite line in politics, either. One of Utah's most honored governors in the past was Simon Bamberger, a Jew. And Mormons helped a lot in electing the present governor, non-Mormon J. Bracken Lee. Of Salt Lake City's Board of City Commissioners, two are gentiles, and the average citizen probably couldn't tell which two they are.

• **Comfortable Living**—Partly because of their ingrained thrift, people in Salt Lake City have a pretty high standard of living. Their per capita income is $1,300, a bit lower than the national average. But 69% of Salt Lakers own their homes, and there are as many automobiles registered as there are families. In 1950, 60% of families had an income between $3,000 and $6,000. The children have a good chance of going to college, since Utah leads the nation in persons receiving higher education.

WHAT'S CHOW MEIN? Miscellaneous pieces, most people think. Chun King's recipe: bean sprouts, water chestnuts, onions, seasoning, bamboo shoots, chicken, celery.

BOSS Paulucci lets his educated taste buds decide. It's got to be "fit for a king."

Minnesota Money Promotes Chop Suey

It was worth $200,000 to the state of Minnesota to keep the chop suey business in Duluth.

Jeno F. Paulucci, who processes and distributes more than a dozen varieties of Oriental-American foods, was on the point of leaving Duluth about a year ago. He needed more space, and one state had already offered him the sort of new plant he wanted.

But Minnesota decided that the removal of Paulucci's Chun King Sales, Inc., would be a body blow to its local celery industry. As a result, the state, through its Iron Range Resources & Rehabilitation Commission, allocated $200,000 for Paulucci's use. Chun King will reimburse the state over a period of years.

• **State Help Aids State**—Last month Chun King moved into the plant it bought with part of the funds—the remodeled site of the Universal Match Co. in Duluth. The company intends to use the rest of the $200,000 to build a cold storage plant with capacity for more than 1-million lb. of celery.

With the new storage facilities, Paulucci will be able to buy more than half his present annual requirement of about 8-million lb. of celery from farmers in the nearby agricultural area. As a byproduct of his deal with the Iron Range Resources & Rehabilitation Commission, Paulucci will throw as much business as possible to other Minnesota producers.

Paulucci has already alerted produce and poultry raisers to the fact that he will be in the market for about 2-million lb. of onions, 250,000 lb. of poultry, as well as large supplies of eggs, meat, and mushrooms.

• **Rapid Growth**—Paulucci, 33, was born in Aurora, Minn. He started to study law, but, when his money ran out, went to work as a wholesale grocery salesman for Hancock-Nelson Co. of St. Paul.

While Paulucci was selling packaged dehydrated garlic, he got interested in fresh bean sprouts, started experimenting with them, and ended up with the Bean Sprout Growers Assn., Inc.—which was putting out canned chow mein. Later he purchased the company and in 1947 formed Chun King Sales, Inc.

The company started life in a quonset hut in Grand Rapids, Minn.—with a staff of 20. By late 1947 it had outgrown the hut, and early the next year moved into larger quarters in Duluth. Paulucci picked Duluth because the city is in the center of one of the best source areas for the company's main raw ingredients—celery and onions. When Jeno Paulucci moved into his new quarters last month, his staff had grown to 250.

• **Sales Campaign**—At the beginning, Paulucci's venture was handicapped by consumer resistance. He had to break down the idea that Chinese food was packed in basements or small buildings without any sanitary packing supervision. Also, it had been the practice of the chop suey industry to promote the ingredients of the dishes, leaving the housewife to assemble and prepare the end product. Many women just wouldn't go to all the trouble. Paulucci makes a big point that his products are packed under government inspection and are of high quality. He has also gone to the expense of installing pressure packing equipment, which, he claims, will keep canned noodles from becoming rancid for at least as long as five years.

• **Other Facets**—A while back, Paulucci decided that he could expand with profit. Now he heads three other related companies:

• Orient Express, Inc., a trucking firm that delivers Chun King products to food distributors and brings back raw materials from suppliers.

• Wilderness Valley Farms, Inc., growers, packers, and marketers of fresh fruits, vegetables, poultry.

• Northland Foods, Inc., which packs Wilderness pie mix.

• **First Love**—Paulucci has never lost his interest in bean sprouts. The company has one of the world's largest hydroponic gardens in the world. (The beans are grown by a patented process without soil, only being watered four times daily with fresh untreated water. Growth is rotated so that a new bean crop is harvested and processed every day.)

Paulucci uses about 350-million lb. of sprouts yearly. He imports his water chestnuts and bamboo shoots from China—he has about a year and a half's supply on hand, but Paulucci doesn't know what's he's going to do when that's exhausted.

ROLLING TO NEW RECORDS

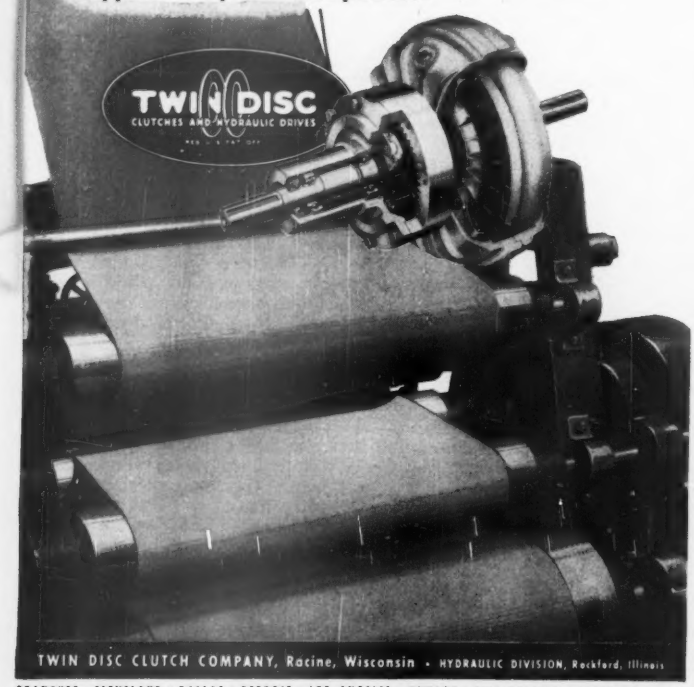
It could be textiles, or paper, or strip steel. Or any of America's basic needs. In each, the nation is rolling up new production records.

Twin Disc for 33 years has specialized in the RIGHT way to engage and disengage productive horsepower with *the most complete line* of friction clutches, *the most versatile line* of industrial fluid drives. That's why so many *leading equipment manufacturers* look to Twin Disc to recommend and supply these vital connecting links.

And, that's why, too, Twin Disc plays so important a part in America's productive might.

and TWIN DISC applies the production-power!

The Twin Disc HYDRO-WYND . . . a unit which improves quality . . . speeds production, by maintaining automatic even tension at constant lineal speed during "roll build-up".



TWIN DISC CLUTCH COMPANY, Racine, Wisconsin • HYDRAULIC DIVISION, Rockford, Illinois

BRANCHES: CLEVELAND • DALLAS • DETROIT • LOS ANGELES • NEWARK • NEW ORLEANS • SEATTLE • TULSA

Who Suffers . . .

. . . most among retailers when a town's key industry shuts down? Chicago U. survey finds some answers.

What happens to the small retailer when his customers are out of work?

That's what the National Opinion Research Center—a nonprofit polling organization affiliated with the University of Chicago—wanted to find out. So in February, 1950, NORC sent its interviewers to talk with merchants in a Midwest industrial town (population 15,000) whose key industry—a railroad equipment plant—had been closed down for six months.

This was the general situation the interviewers started with: Out of a county labor force of 11,825, about 2,500 were unemployed, the bulk of these in the survey town. Gross retail sales in the county had dropped from $2.5-million in August, 1949, when the shutdown began, to $1.8-million in February.

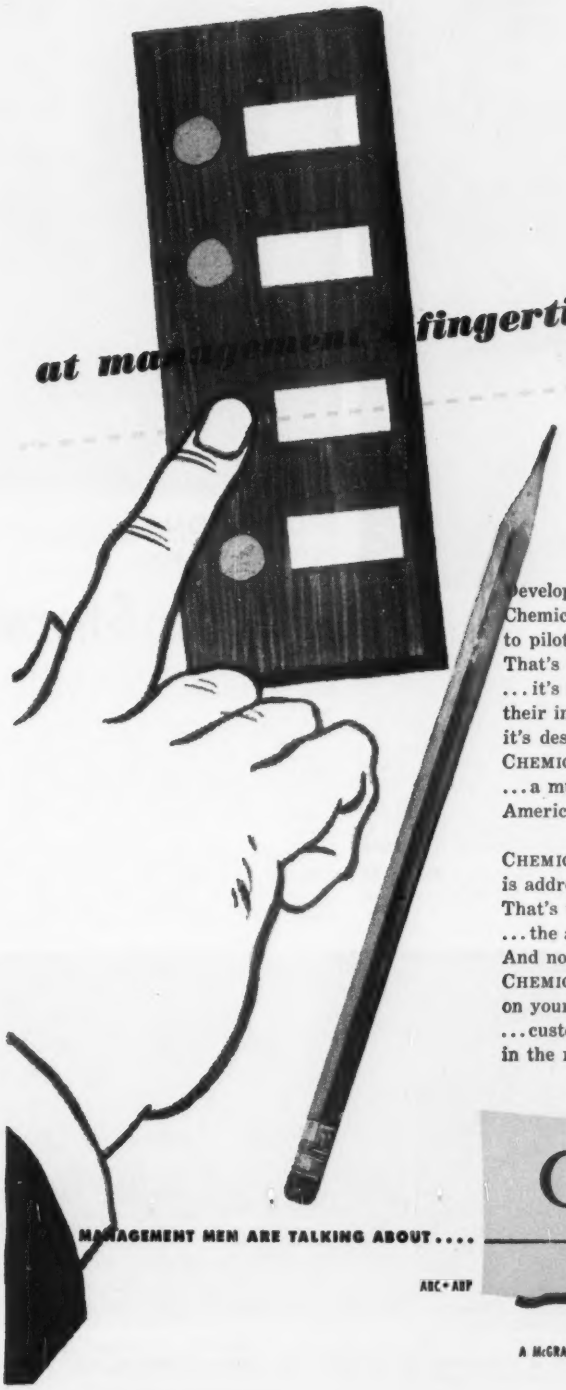
• **No Pay, No Luxury**—By and large, researchers found that the purveyors of working class luxuries were the hardest hit—automobile dealers, butchers, liquor salesmen, haberdashers, and retailers of photographic supplies. On the other hand, sales of cut-rate and secondhand merchandise rose, as did sewing machines and fishing equipment, which help families conserve cash. Repair services had a minor boom. In some cases merchants reported competition from unemployed workers.

Grocers got plenty of customers, but not much cash. Generally, however, they were fairly philosophical about it: After all, their attitude ran, what can you do when a family needs food? It's better than having them move away.

• **Cushion**—Unemployment insurance benefits paid to wageless workers served as a $951,255 cushion for merchants and landlords during the 12 months prior to the survey. State law provided that insured unemployed workers each receive a maximum unemployment compensation benefit of $20 a week for 26 weeks in one benefit year.

By January, 1950, when unemployment compensation payments reached a high of $112,505, at least 750 earners had already exhausted their claims for the year ending Mar. 31.

• **Credit**—Most of them were still out of work. They bought food, housing, clothing, and medical care with what savings they had, or on credit. No one knows just how much credit was outstanding on retailers' books, but two-thirds of them reported that at least 10% of their sales were on the cuff.



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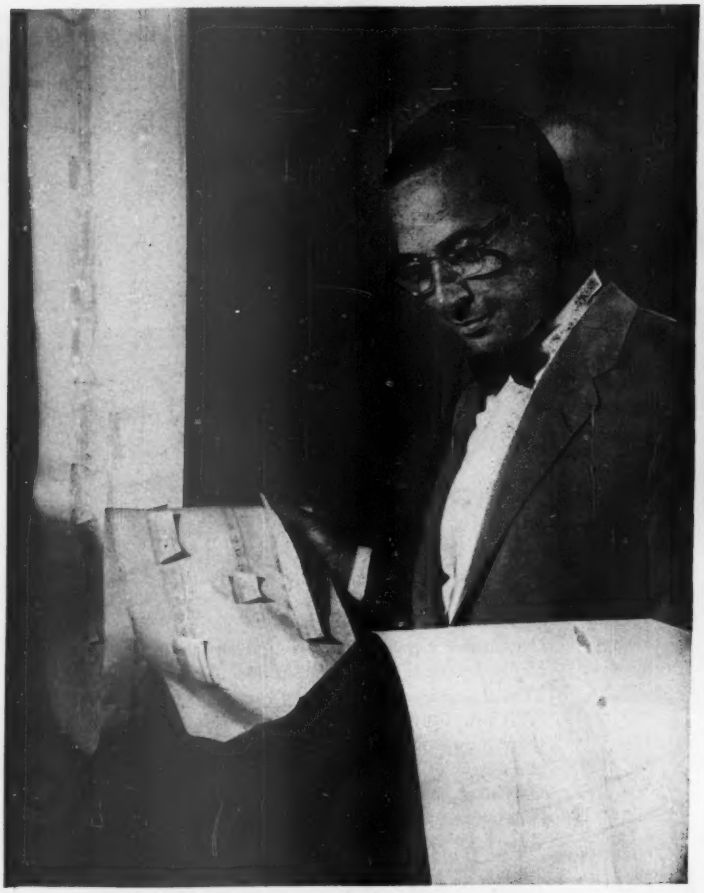


165 STEPS Charles Y. Lazarus looks at chart of steps in processing a charge-send sale. There used to be 234 steps. Slips pasted over chart show what steps were eliminated by Lazarus.

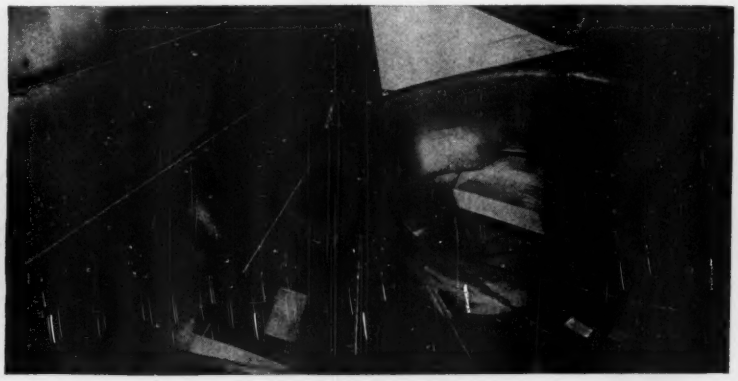
STOCKROOMS Peripheral rooms near Lazarus' selling floor keep stock handy.

Large Stores

Q. How many steps does it take to process a charge-send sale in a department store?

A. At F. & R. Lazarus & Co. in Columbus, the latest tally is 165 steps. But this is something new. Until very recently, Lazarus—like most other stores—had no idea exactly how many there were.

Then a study disclosed the shocking total of 234 steps for a charge-send, more for other types of charge transactions. So Lazarus rolled up its sleeves,



HANDLING Goods handling has been mechanized by Lazarus. Girl (left) puts package for shipment to customer in chute (right). System of best conveyors carries it underground to shipping platform where it goes on. . . .

WORKROOMS Alteration rooms are streamlined. New pressing machine is one improvement.

BOOKKEEPING Photo-copying of invoices by Haloid process speeds up payment.

Start New Attack on Costs

trimmed an average of 25% off the paper work.

Q. What is the productivity of clerks in the accounts receivable section?

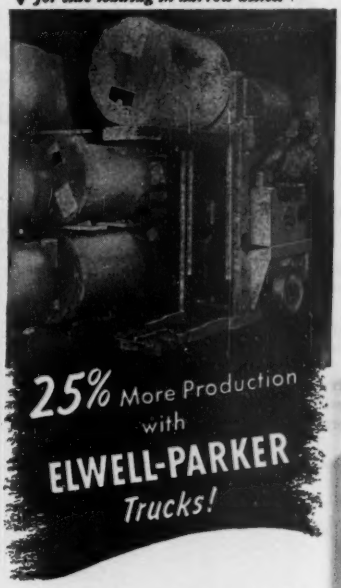
A. According to a new National Retail Dry Goods Assn. study, anywhere from 37% to 66% of clerks' time is spent in such productive work as billing and stuffing. How do they spend the rest of their working day? No one knows for sure. NRDGA had to label the remainder "indirect and nonproductive hours."

These two items are indicative of today's situation in department stores. Merchandisers are hampered badly by the fact that department stores, as a whole, simply haven't done enough basic research on costs and how to cut them.

• **Shortest Distance**—The Lazarus store, which has done more than most to define and attack the problem, is the first to admit the lack. "We've barely scratched the surface," says the store's executive vice-president, Charles Y.

SORTING RING Clerk (right) dictates destination of package to tape recorder, shunts it to route. Package can be located via IBM cards.

High lift platform truck especially suited for side loading in narrow aisles.



Handling 2300 lb. paper rolls and other printing supplies, this publisher gained three benefits with E-P trucks: 1. *Faster Work with Less Labor* — Mechanized handling has freed 3 men for other duties and upped production one quarter. 2. *Savings in Space*—Elwell-Parkers tier rolls up to 4 high — 2 were the limit when done manually. 3. *Greater Safety* — Hazardous lifting has been eliminated. Also, damage to paper is minimized.

Today, in over 300 different industries, production is being speeded by E-P trucks. Make sure *you* are achieving the full benefits of mechanized handling — draw on Elwell-Parker's 45 years' experience. No obligation.

FREE BULLETIN

on Scientific Materials Handling. Ask for "Industrial Logistics" and name your product. Write The Elwell-Parker Electric Company, 4009 St. Clair Ave., Cleveland 3, Ohio.

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INDUSTRIAL RUBBER PRODUCTS BY
REPUBLIC RUBBER DIVISION
Lee Rubber & Tire Corporation
YOUNGSTOWN, OHIO

". . . increasing volume covered up the lousy job stores were doing costwise . . ."

DEPARTMENT STORES begins on p. 90

Lazarus. "We have a long way to go before we find the shortest distance between two points—the manufacturer and the consumer." Lazarus points out that even today it's impossible for a retailer to make a solid guess as to the relationship of capital expenditure—represented, say, by a belt conveyor—to per unit costs. Yet department stores must find basic ways to cut costs, and they know it.

"A decade of sharply increasing volume," says one expert in the field, "covered up the lousy job department stores were doing costwise. Now with sales reaching a plateau, they can't hide the fact from themselves anymore."

• **Cost per Sale**—In about 10 years, department store cost per transaction has risen nearly 90% to reach $1.25. This, to quote a major retailer, is "frightening." You can see the same trend by a glance at total store operating expenses, which have increased from 29.3% of sales in 1947 to 36.9% the first quarter of this year.

The picture worries department store people, as well it should. They are afraid that they may lose more and more sales to low-cost stores of the supermarket type, which can do business on perhaps half the department store margin.

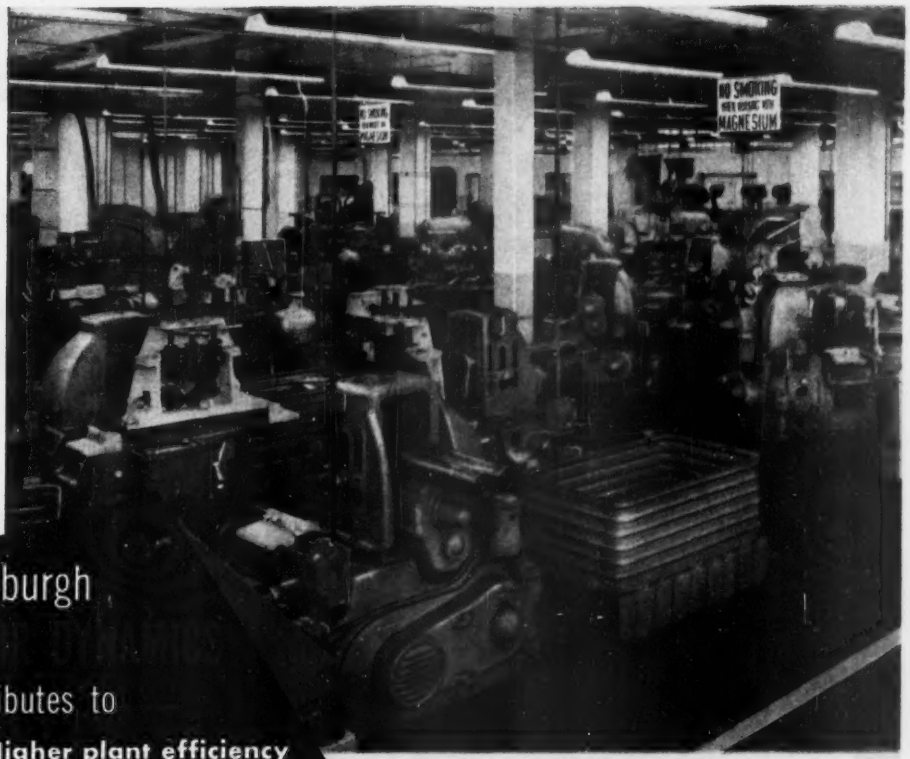
• **Complexities**—The problem of cost cutting for a department store is particularly tough. For the two things that distinguish a department store from other types of outlets—the vast range of goods its carries, and the services it provides—are also the two things that run up costs. Carrying, handling, and selling a big jumble of merchandise is expensive. So is providing charge accounts, delivery service, and all the other services most department stores offer.

Yet without these—certainly without the wide range of goods—a department store would cease to be a department store.

About service, the trade is of two minds. Some merchandisers see self-service as the only eventual salvation. Others balk at this, say that personal service is heart and soul of a department store.

• **How Much?**—At bottom, however, most trade people will agree that some measure of self-service is necessary if department stores are to survive. The question is what degree.

Right now department stores are making their first cautious experiments with self-service. They are not dispens-



Pittsburgh

contributes to

- **Higher plant efficiency**
- **Greater safety**
- **Better housekeeping**

White Sewing Machine Corporation utilizes scientific application of the *energy in color* in six and one-half million dollar expansion program to improve working conditions and increase production.

THE WHITE SEWING MACHINE CORPORATION, of Cleveland, Ohio, built more units last year than in any preceding year in its history. Production executives attribute a substantial part of this increase to Pittsburgh COLOR DYNAMICS.

● **Recently,** White embarked upon a six and one-half million dollar modernization and expansion program. Included was the purchase and remodelling of a building to house an up-to-date metal division. This plant now turns out more machines with less floor space than the old factory.

● **"Several years ago** we used Pittsburgh COLOR DYNAMICS in repainting our main offices," writes E. J. Sebek, Vice-President in charge of manufacturing. "So beneficial did this practical use of the *energy in color* prove to be that we decided to use this system in 'color engineering' the new plant.

● **"In place of drab,** brown walls, we now have attractive surroundings of *eye-rest* and *morale-building* colors. *Focal* colors on working parts of machines reduce eye-strain. Our workers see their jobs better and do not tire as quickly. Nor do they sustain as many lost-time accidents because controls and hazard areas are clearly indicated by *safety* colors.

● **"Volume and quality** of production have been improved. Morale has been raised by the better and cleaner working conditions. Our workers take greater pride in their surroundings so that housekeeping problems have been reduced.

● **"We have** a constant stream of visitors to this new plant. Many of these are production executives from other companies who are eager to see what we have done and how. We are always happy to recommend the use of COLOR DYNAMICS to them because of what it has accomplished."

● **Why not investigate** what Pittsburgh COLOR DYNAMICS might do for you? Try it on a few machines or in a department or two—and see the difference it makes!

FREE—Color Engineering Study of Your Plant on Request!

● **For a complete explanation** of COLOR DYNAMICS, send for our free, profusely-illustrated booklet. Better still, let us make a scientific engineering study for you—free and without obligation. There's a trained COLOR DYNAMICS expert at each of our 75 warehouses. Call your nearest Pittsburgh Plate Glass Company branch and arrange to have a representative see you at your convenience. Or mail coupon.

SEND FOR A COPY OF THIS BOOK!

Pittsburgh Plate Glass Co., Paint Div.
Department SW-91, Pittsburgh 22, Pa.

☐ Please send me a FREE copy of your new revised and enlarged booklet, "*Color Dynamics In Industry.*"

☐ Please have your representative call for a Color Dynamics Survey of our properties without obligation on our part.

Name _____

Street _____

City _____ County _____ State _____

PITTSBURGH PAINTS

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

How to stretch a good

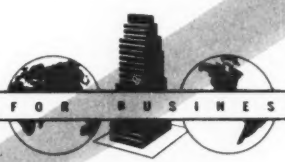
You can do it with

MECHANIZED

MECHANIZED SELLING works for you at a cost you can count in pennies. The results pay off in dollars added to your profit margin! Put the high speed and low cost of advertising to work for you. By quickening the first three steps to a sale (see chart) MECHANIZED SELLING *stretches* your sales force—adds precious time to each salesman's day which he can devote to the specialized jobs that he, and he alone, can do best: making a specific proposal and closing the order.

THAT'S MECHANIZED SELLING AT WORK!

Have you seen the fast-reading McGraw-Hill booklet "ORDERS AND HOW THEY GROW"? It describes Mechanized Selling in the language of the man who needs it most—your salesman! We'll be glad to send you a copy.



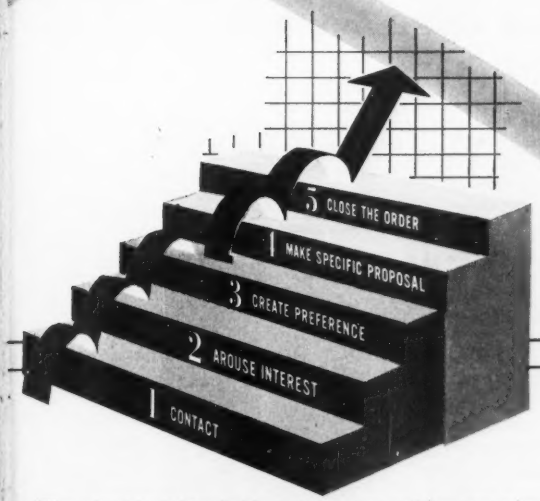
HEADQUARTERS FOR BUSINESS INFORMATION

McGRAW-HILL PUBLICATIONS

330 WEST 42nd STREET, NEW YORK 18, N. Y.

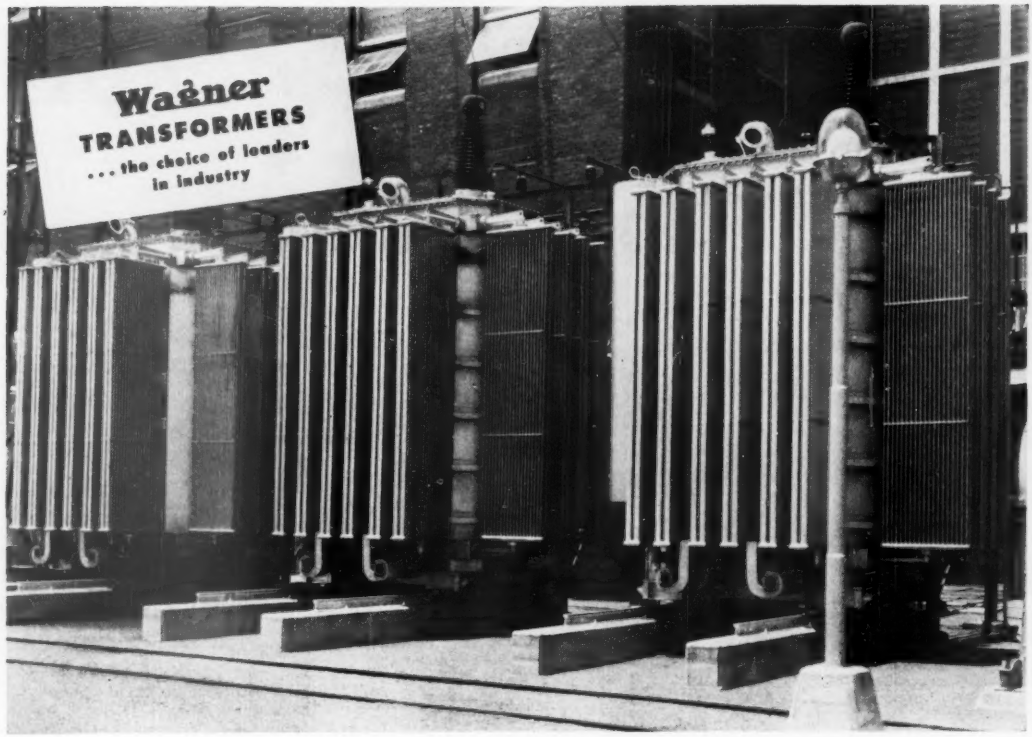
salesman

SELLING



When advertising is doing its job on steps one, two, and three, your salesman has more time for steps four and five. This is MECHANIZED SELLING at work.

THE COST of taking your product to market is usually as important in your profit picture as how many units you sell. A sales budget that has to be stretched to cover outsize selling costs can't help cutting into your profits. That's why your skilled salesman's time is money. He must use expensive time to the best possible advantage. You can help him by clearing away preliminary selling chores.



it's booming time down South . . .

Today, the South *is* booming. Its rapid development and rising importance offers a challenge to all industry. The South has room—it has resources—and it has unlimited facilities for production.

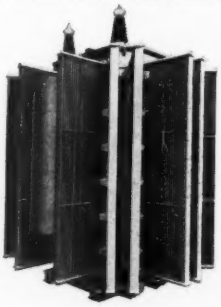
Alabama Power Company plays an important part in this picture by supplying the vital electric power that makes industrial development possible.

Wagner transformers perform an essential job in this power supply operation. A typical example is shown above . . . these Wagner Power Transformers are installed at the Chickasaw Steam Plant of Alabama Power Company, where they step up the voltage of a 50,000 kilowatt turbo-generator to 110,000 volts for transmission to industrial centers.

Wagner transformers are used by a great many power companies and by their industrial customers, as well, because Wagner Transformers have a reputation for unfailing dependability—backed by sixty years of service to the power industry.

Wagner engineers are qualified to specify the correct transformer for *your* requirements. Consult the nearest of our 31 branch offices, or write us.

Wagner Electric Corporation
6460 PLYMOUTH AVE. • ST. LOUIS 14, MO., U.S.A.



Wagner Electric Corporation 1891 WE 1951

ELECTRIC MOTORS • TRANSFORMERS
INDUSTRIAL BRAKES
AUTOMOTIVE BRAKE SYSTEMS — AIR AND HYDRAULIC

WT51-5

"... Stores are afraid to cut back drastically ..."

DEPARTMENT STORES begins on p. 90

ing with sales clerks, but they are bringing goods out in the open, on trays or racks, making them generally easier for people to get at (BW–Sep.30'50,p52). Here and there, individual self-service fixtures are being installed.

Perhaps the boldest experiment in self-service–and a successful one–has been pioneered by Wieboldt's in Chicago. A few years ago it turned the basement appliance section of one of its stores into a self-service department, with checkout counters and all. Now it is installing the same system in others of its stores around Chicago–and department store people are watching the results with keen interest.

• **Under Eye**–The services offered by department stores are generally under scrutiny today. Stores are afraid to cut back drastically for fear of losing business. So they compromise. The idea is to have the service available–but not to push it on the customer. Richmond's Miller & Rhoades pretty much sums up this trend with a slogan it urges on its employees: "Gift boxes should be requested, not suggested."

• **Packaging**–Another important area under attack is the one that lies between the manufacturer's production line and the store's receiving platform.

Charles Lazarus puts the problem this way: "One of our main expenses today is just getting an article back into its original state when it left the factory. First the factory wraps it up, then we unwrap it. Then we wrap it up again so the customer can unwrap it."

There is a growing theory among retailers that actually the factory can do a lot of things better and cheaper than the retailer. For example, the factory has to package its goods anyway. So why not have it package them in the sizes that people buy–dozens or half dozens instead of gross lots?

This idea is gaining ground. Lazarus reports, for instance, that it is being done in glassware. The goods go to the customer in the original factory package.

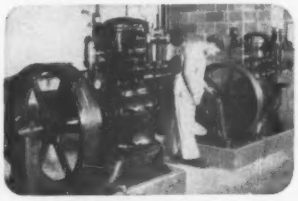
• **Preticketing**–The same thing applies to preticketing of goods. In the case of more or less staple items, where prices don't fluctuate much, the factory can attach a price tag with the store's retail price on it. This saves considerable time and expense at the store in marking.

Preretailing runs along the same lines. In essence, this is a system whereby the orders for goods are marked with the store's selling price. The manufacturer stamps these prices on the in-

test it yourself
Tear a sheet of Nekoosa Bond. Resistance you'll get from the fibers proves that Nekoosa has built-in strength!
nekoosa bond
HAS STRENGTH
use it for all of your business stationery!
Every modern device is used at our mills to *pre-test* Nekoosa Bond for *strength, appearance* and *finish.* But you needn't take our word for it. *Test it yourself!* Give Nekoosa Bond the tear-test. Then note how firm and smooth it is. And listen to its crisp crackle. You'll *know* why Nekoosa is the *one* paper for *all* of your letterheads, invoices, statements and other business forms. Nekoosa-Edwards Paper Company, Port Edwards, Wisconsin.
BOND
Nekoosa
MADE IN U.S.A.
• IT PAYS TO PLAN WITH YOUR PRINTER

Fruit Storage Stops Shrinkage with New Frick Refrigerating System.

Gillan Brothers maintain relative humidities of 85 per cent or higher in their 40,000-bushel apple storage at St. Thomas, Penna., even with temperatures of 32-33 deg. F.! These high humidities keep the moisture where it is wanted — in the fruit.



Two Frick Ammonia Compressors Used for Cooling Gillan Brothers' Apple Storage.

This remarkable cooling system is equally desirable for storing vegetables, nuts, hides, textiles, and other products. Covered by patent applications, the new Frick system is revolutionizing cold storage practice. Let us show you how it can save your products — and your profits.

DEPENDABLE REFRIGERATION SINCE 1882
FRICK CO.
WAYNESBORO, PENNA., U.S.A.
Also Builders of Power Farming and Sawmill Machinery

Joe got a big hand!

He came to the rescue when rejects were mounting. He suggested changing to a Simonds Abrasive Company grinding wheel. It did the trick . . . because it was right in grain and grade for the job. A Simonds engineer will gladly help *you* find out where these efficient production tools can fit into your factory operations. No obligation. Write.

SIMONDS ABRASIVE CO.
Grinding Wheels

EXECUTIVES — *Simonds Abrasive Company's complete line has everything you need . . . grinding wheels, mounted points and wheels, segments and abrasive grain.*

SIMONDS ABRASIVE CO., PHILADELPHIA 37, PA. BRANCH WAREHOUSES: CHICAGO, DETROIT, BOSTON
DISTRIBUTORS IN PRINCIPAL CITIES

Division of Simonds Saw and Steel Co., Fitchburg, Mass. Other Simonds Companies: Simonds Steel Mills, Lockport, N. Y., Simonds Canada Saw Co., Ltd., Montreal, Que. and Simonds Canada Abrasive Co., Ltd., Arvida, Que.

"... 40% of a sales person's time is still taken up with red tape...."

DEPARTMENT STORES begins on p. 90

voice; goods are marked at the store from this invoice. No buyer is required to be on hand when goods are marked —always a very troublesome bottleneck.

Mechanization is also becoming an important part of cost-saving in stores. Lazarus' sorting ring (pictures, page 90) is one example. Another Lazarus innovation is its inclined belt running from receiving platform to marking room. When fully installed, this device will eliminate the familiar freight elevator, another constant source of bottlenecks in all stores.

Dozens of other mechanical developments are being tried out successfully. In New York today ready-to-wear clothes are being delivered to stores on hangars, slipped onto overhead rails that carry the garments to the selling floor. All the things that have to be done to the garments are done as they travel along the rails.

• **Juggling Jobs**—Labor efficiency is also gaining ground, but here there is still a great amount of work needed. A big difficulty with department stores is the basic fact that today the relationship of people behind the scenes to those actually on the floor selling is about three to two. "Imagine an industry," comments Charles Lazarus, "in which so many people are unproductive."

The Lazarus store is trying to cut down this waste labor by doubling up on its salesclerks' jobs. It has them use some of their spare time in wrapping packages, pressing clothes, and keeping track of stock. The work on stock is helped by Lazarus' recent installation of peripheral stockrooms. These storage spaces are just off the actual sales floor, which makes them easy for clerks to get at.

• **Red Tape**—But this is only a beginning. Lazarus figures that as much as 40% of a sales person's time is still taken up by red tape.

Lazarus and other stores have made a big dent in this problem by installing the so-called register (or floor) audit system. Under this method, all sales—whether cash, charge, or whatever —are rung up on the cash register. This has helped to cut out many of the steps formerly involved in handling charge accounts. It has also cut out the need for clerks to tally their charge books each day. And on top of this, Lazarus can keep a running check on every department's sales.

• **Machinery**—Elsewhere in the bookkeeping system, Lazarus is applying the

latest developments in office machinery—duplicating, billing, mailing machines.

But the cost of a salescheck still comes to 11¢ each for processing. And mistakes—thanks to the complexity of the system and the possibilities of human error—are still numerous. How can they be cut?

The biggest hope, thinks Charles Lazarus, is a development that is still in its infancy—electronic bookkeeping. No one wants to talk much about it, but work on electronic bookkeeping devices is going forward. Sears, Roebuck, for instance, has experimented with the idea for some time. J. L. Hudson in Detroit is now in the latter stages of work on an electronic memory machine to keep track of inventory.

When electronic machines do become available, Lazarus thinks that 11¢-per-sales-check figure may drop overnight to 5¢.

Denver Theaters Tap TV Network

By putting two and two together, a couple of Denver theater operators have discovered a bonanza. John and Harris Wolfberg noted that:

The AT&T's transcontinental microwave relay system (BW—Aug.25'51, p24), which will carry network TV shows from coast to coast, passes through—and over—Denver.

Denver is the biggest city without a TV station, so even if you had a TV set there you couldn't get those programs soaring by.

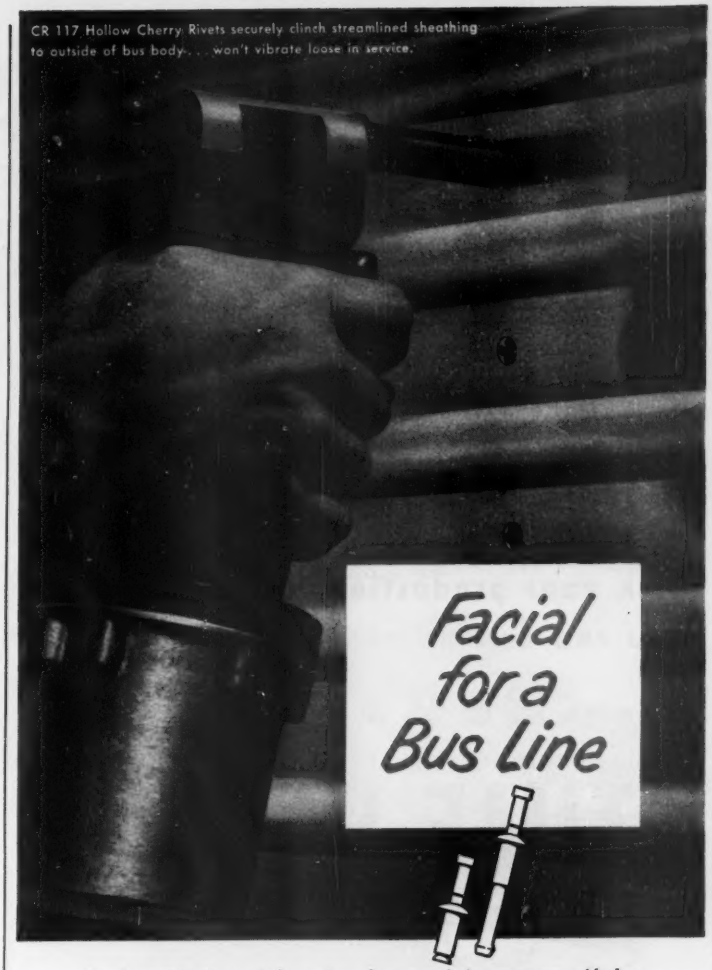
The Wolfbergs worked out a deal whereby they will tap the relay as it goes through Denver, pipe network shows—commercials and all—into two downtown theaters. Together the Broadway and the Paramount (they're taking the latter theater over from Fox) seat about 3,900.

Later the Wolfbergs may extend the circuit by laying coaxial cable to several of their drive-in theaters.

Basic costs will come to $30,000 or $40,000 a theater for installing large-screen TV equipment. After that the Wolfbergs will pay $17,500 monthly line charges to AT&T, plus whatever the networks charge for the shows.

• **Out of FCC's Reach**—This is one TV deal the Federal Communications Commission can't touch, because the Wolfbergs aren't going on the air with a signal. If others want to get into the act, AT&T will, of course, have to lease to them, too.

The Wolfbergs hope to get the Broadway equipment installed in time for the World Series. If they do, a Denver radio columnist says he'll settle for the hot-dog concession to those standing in line.


CR 117 Hollow Cherry Rivets securely clinch streamlined sheathing to outside of bus body. . . won't vibrate loose in service.
Facial for a Bus Line

Continental Trailways is busy these days completing a system wide bus restyling program. They're streamlining conventional motor coaches by sheathing them in bright, modern, corrugated aluminum. And under the aluminum they place a heavy layer of spunglass insulation. This "facial" adds beauty and glamour as well as increased passenger comfort.

In determining the method to do this blind fastening job, Continental considered the same factors that you face in your work—speed, durability, saving of manpower and economy.

And based on these factors, Continental chose Cherry Rivets. Cherry Rivets are mechanical blind rivets, rapidly installed by *one* man from one side of the job. A pulling action does the work... no twisting, no exploding no hammering.

There may be a Cherry Rivet that could add speed, efficiency, endurance and economy to your work. Why not find out?

Write today for an illustrated booklet showing types of Cherry Rivets, their uses and methods of installation.

Cherry Rivet COMPANY
233 Winston Street, Los Angeles 13, California

A DIVISION OF Townsend COMPANY • EST. 1816

Link your production to LCL service you can depend on

...with B&O's

TIME SAVER

Many a production problem can now be solved, and many a sales effort aided through this streamline service. With its ability to save ⅓ or more shipping time and to provide *Sentinel* dependability, B&O's Time Saver is a service every LCL shipper should look into. *Ask our man!*

BALTIMORE & OHIO RAILROAD

Constantly *doing things*—better!

MARKETING BRIEFS

Giant fall promotions are planned by the appliance industry to needle sales. Two of the biggest: Crosley Division's "American Way" consumer contest in which $3-million in cash and merchandise will be given away; General Electric's offer of free trips to New York or San Francisco to 1,000 dealers and distributor salesmen for autumn sales records.

•

Night openings for department stores are spreading. Hecht Co. and four other major Washington stores will stay open on Thursdays; specialty shops started the custom there several years ago. In Milwaukee, where Thursday openings have been observed for some time, department stores will now stay open on Monday nights as well.

•

Food coupon racket in New York has been disclosed by the Better Business Bureau. Coupons, some of them with a redemption value of as much as 21¢, are stolen in the mails, sold to grocers at a discount. One wholesaler paid out $50,000 on redemptions. The racket costs wholesalers about $1-million a year, according to BBB.

•

Expansion of Kaufman's department store in Pittsburgh is in the cards, waits only on court decision involving the Carnegie Building across the alley from Kaufman's. U. S. Steel, moving out of Carnegie Building for bigger quarters, would buy the building from Carnegie heirs and rent to Kaufman's. A court must O.K. the transaction.

•

Wholesale trade is highly concentrated in larger cities. Latest figures from the 1948 Census of Business show that about 35% of the nation's 243,366 wholesalers are in cities of more than 500,000 population. These wholesalers handle about 51% of all sales of wholesaler establishments. But the big cities only have 17.5% of the nation's total population.

•

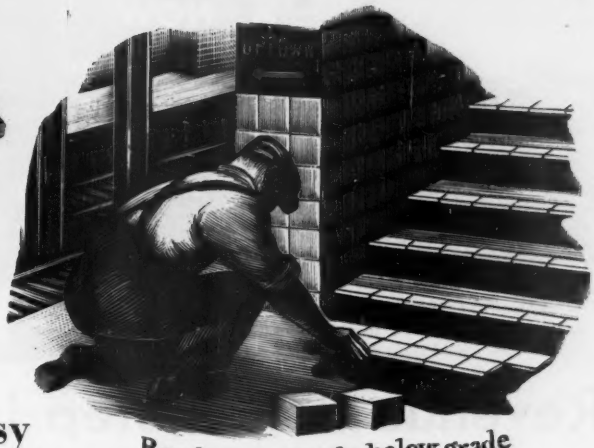
Battle of beer bottles has been won by Miller Brewing Co. A Wisconsin court granted an injunction restraining Blatz Brewing Co. from using its present bottle. It's too much like the bottle for Miller's High Life beer.

•

Gasoline price war is going full blast again in New Jersey. Prices were as much as 6¢ a gal. under normal. Independents' spokesmen say this war is even worse than last year's (BW—Aug. 19'50,p66).

Fastens wires to outside wall

Installs plastic laminates



Bonds non-slip tile below grade

This adhesive makes hard jobs easy

No need today to use scarce materials and spend long hours fastening wires to walls by mechanical means. Dabs of a new Armstrong's Adhesive will attach the wires just as securely—and in a fraction of the time.

This new Armstrong's Adhesive is exceptionally fast and easy to use. It has no critical open time and provides a tight bond without clamping. Hence, a man can install his own plastic sink top simply by rolling or pressing it into place on a layer of this cement.

Because it is made with a synthetic rubber base, this new adhesive has high resistance to oils, alkalies, and moisture. It's ideal for cementing non-slip tile above or below grade, in factories or subways. It develops high early strength and maintains strong dead-load resistance. Thus it can be used also for jobs like attaching mirrors and other fixtures to walls, without drilling holes and without mechanical fasteners.

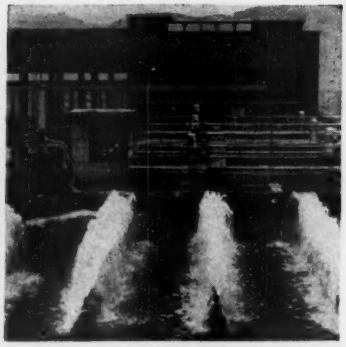
If you have a fastening or bonding problem, send us the details and we'll be glad to see if this or one of the many other Armstrong's Adhesives could be of service to you. Send complete information to Armstrong Cork Company, Industrial Adhesives Department, 5109 Reservoir Street, Lancaster, Penna.

ARMSTRONG'S ADHESIVES

Made by the makers of Armstrong's Linoleum

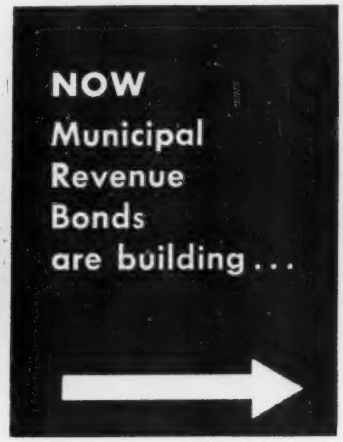
FINANCE

PUBLIC BRIDGES like the $35-million vehicular span stretching more than a mile across San Francisco's Golden Gate.



WATER WORKS supplying the needs of hundreds of growing cities, towns and villages, and an ever-expanding industry.

PUBLIC ROADS like the Pennsylvania Turnpike, the 260-mile express road bisecting the state from Philadelphia to Pittsburgh.



PLANTS FOR RENTAL TO PRIVATE COMPANIES

Revenue Bonds Step Into New Roles

Local governments have dug up one more extracurricular and unorthodox use for that most popular of all postwar municipal financing gimmicks—the revenue bond (BW—Jun.24'50,p86).

Communities anxious for greater industrialization are beginning to sell revenue bonds to finance construction of industrial plants designed to be leased to and operated by private companies.

It's still too early to determine how far the municipalities will go into the industrial-plant building field. But the trend is drawing sharp notice in some conservative Wall Street quarters.

• **Broadening**—For a long time, a number of Streeters have disliked the ever-broadening path traveled by revenue bonds. The latest developments have heightened their uneasiness. They now see some inherent aspects that may be unfavorable to municipalities and bond buyers alike. Revenue bonds are not true municipal obligations, even though they are issued by states, counties, and cities, or an "authority" organized by local governments.

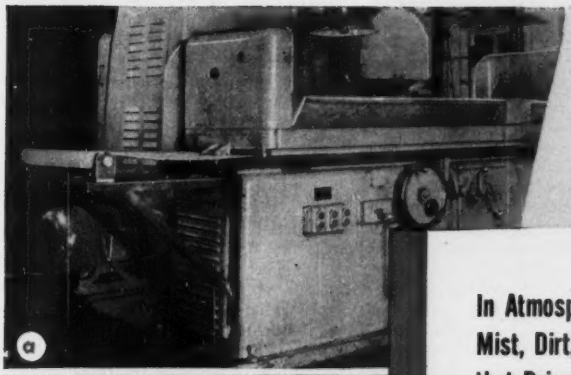
Unlike the so-called "general obligations"—which comprise the bulk of outstanding municipal bonds—most revenue bonds are not secured by a full-faith pledge, that is, the credit and taxing power of a political subdivision.

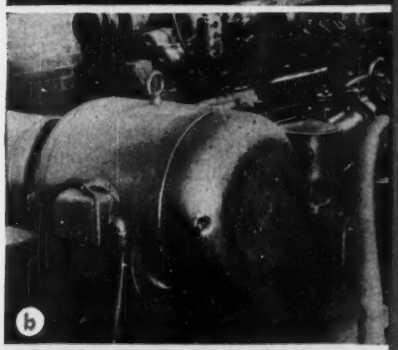
Revenue bonds are sold to finance the construction of an income-producing facility—a water, power, or transit system, let us say, or perhaps a toll road, a bridge, or a dock. The sole backing for both the principal and interest comes from the revenues of the facility.

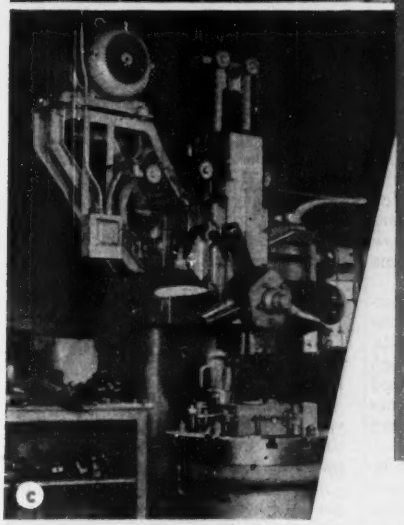
• **Warning**—Actually, revenue bonds as a class are really more akin to corporate obligations than they are to orthodox municipals. Many people don't realize this. That's why some time ago (BW—Aug.13'49,p62) Comptroller of the Currency Preston Delano felt it necessary to speak a word of warning.

Too many bankers, Delano said then, tended to put revenue bonds on the same plane with general obligations. This, he said, was a mistake: Their credit soundness is "no better than the fundamental financial and management soundness of the facilities . . . they have financed."

• **Not New**—It's an old practice for communities to use lures of one kind or another to induce industrial companies to set up shop within their confines. They have offered such things as free plant sites, unusual utility services, partial—often complete—exemption







In Atmospheres Containing Dust, Mist, Dirt, Fog... Protect the Power that Drives Your Production Machines

... Use Century

Totally Enclosed Fan Cooled Motors

In locations where the air is charged with substantial quantities of metallic or abrasive dusts, coolant mists or fog, or oil-laden factory dusts, Century Type TEFC Motors assure protection to help maintain uninterrupted production.

Because the vital parts of the motor are sealed in an inner frame, they are isolated from the outside atmosphere. A large fan blows cooling air between the inner and outer frames—keeps the motor temperature well within safe limits.

Wherever there are adverse atmospheric conditions, specify Century Totally Enclosed Fan Cooled motors, to give you the extra assurance that production will be maintained.

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Century C MOTORS

(a) Surface grinder with Century 5 horsepower TEFC motor mounted near the floor.

(b) Century 15 horsepower TEFC motor operates in coolant fog from this grinder.

(c) Boring Mill with Century 5 horsepower TEFC motor.

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-703

Another Leading Motor Repair Shop Finds KLIXON Protectors Prevents Motor Burnouts

WORCESTER, MASS.: Mr. F. P. Sweeney, assistant manager of A. L. Brown & Associates, authorized service station for 10 leading motor makes, distributor, and representative for Browning V-belt drives, *recommends* KLIXON Protectors for motor burnout protection.

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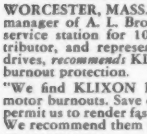
The KLIXON Protector, illustrated, is built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like increased customer-preference, reduced service calls and minimized repairs and replacements, it will pay you well to ask for equipment with KLIXON Protectors.



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from property and other local taxes for a limited period. Local chambers of commerce have shown their willingness to scurry around arranging any reasonable new-plant financing needed to clinch the deals.

• **Step Further**—In three states the use of such bait has become passe. City fathers in the area can now make far more enticing offers. In 1950 Kentucky's legislature gave its local governments the authority to sell enough revenue bonds to assure interested companies that a new modern plant would be available for leasing on attractive terms. A few months ago Tennessee took a similar step; early this summer Illinois also joined the group. A fourth state, Alabama, will probably be marching in the same parade very shortly. Its legislature is now considering and authorizing a bill that has already been approved by the Senate's municipalities committee.

• **No Rush**—Thus far there has been no wild rush to take advantage of the new legislation. But neither have Kentucky and Tennessee ignored it completely.

Last year Danville, Ky., sold $330,000 of new industrial plant revenue bonds to erect a plant for a prominent out-of-town shoe manufacturer. Elizabethton, Tenn., has in the works a similar $4-million issue to obtain the funds it will need to build a plant for one of the biggest textile manufacturers in the United States (BW—Jun.16'51,p54).

Local officials in Kentucky also arranged a court test of their state's industrial plant revenue bond act: it has already been approved by the Court of Appeals, the highest state court. Elizabethton is in the process of giving the Tennessee legislation a testing. The law was recently upheld by the local Chancery Court, and its decision is now awaiting review by the state's Supreme Court.

• **The Deals**—The plant built by Danville will be leased to General Shoe Corp. for 25 years. Rental payments, it is reported, will be just about enough to take care of the principal and interest requirements of the bonds. This means that the plant should be debt-free when the original lease expires.

General Shoe has the option of renewing its lease for 25 additional years at the nominal rental of $1 per annum. Title to the plant will at all times remain with the city, assuring that the property will be exempt from city, county, and state property taxes.

• **Elizabethton**—Terms of the Elizabethton deal—with Textron, Inc.—differ considerably:

• The plant will cost around $7.8-million fully equipped, but the city intends to sell only $4-million of new revenue bonds. Elizabethton expects to finance the rest of the cost, and the amortization, by very high rental payments during the duration of the original lease.

• Textron, which will lease the plant to manufacture nylon tricot fabrics, has agreed to pay the purchase price for the plant site, plus the costs of the referendum in which the new bonds were approved by voters.

• Until the bonds have all been retired, they will be secured both by a first lien on the rental payments and by a first mortgage on the property.

• Textron has agreed to pay an annual rent of $1,560,000 for five years. That will amortize cost of the plant—including the $4-million of bonds. After that, Textron will have the option of releasing the property for nine five-year periods at an annual rental of only $35,000.

• **Ancient**—Revenue bonds aren't a new-fangled American invention; they are a venerable financing medium. There were even revenue bonds outstanding in the 12th Century—obligations secured by revenues from a salt tax.

In England, they have been a familiar sight since the 18th Century. First used by the British to finance the construction of toll roads, they have since been relied on heavily to finance the construction of many other income-producing facilities, such as gas plants, toll bridges, harbor works, and similar projects.

In this country revenue bonds first appeared in 1895, when Spokane, Wash., used them to finance rehabilitation of its water system. However, it took the Reconstruction Finance Corp. to make the trend really flower. In the depression 1930s it encouraged their use—and purchased many such issues—to finance self-liquidating "work projects." This type of financing has been zooming ever since.

The exact amount of revenue bonds now outstanding is unknown. However, it is estimated that there are $24-billion of municipal obligations now out, with revenue bonds accounting for from 10% to 15% of the total.

• **Worries**—Some Wall Street conservatives are uneasy about many facets of the trend to revenue bonds. Here are some of their main concerns:

• In many cases it is possible to issue the bonds without an O.K. by the voters.

• They frequently don't count as debt, when legal debt limitations are figured. Thus they can be used to bypass borrowing limits.

• They can be used to finance projects forbidden by local government charters.

• If a project turns sour, neither the city officials nor the local taxpayers are committed to "buying oats for dead

horses." The bondholder has to stand the gaff.

• Being tax-exempt, they are easily sold in these days of high tax rates. That means there's a chance that through the sale of revenue bonds some local governments may find themselves over-extended if we see a return to a more "normal" level of business activity.

• **Flexible Definition**—Another great cause of worry is the way city fathers have been stretching the terms "income-producing facility" in the postwar period.

Once revenue bonds were secured by only a handful of such "legitimate" municipal projects as toll roads or gas and electric light plants. Lately, though, they've been issued to finance the construction of more and more "odd" municipal services: pools, auditoriums, stadiums and exhibition halls, sewage disposal plants, cold storage plants, airports, garages and off-street parking lots, office buildings, and hospitals, penal institutions, schools, and bridges destined to be rented to states and other local governments.

• **Selling Exemption**—Even more dangerous, objectors to the trend say, is the issuance of tax-exempt revenue bonds to build plants for industrial companies.

This development, as they see it, comes close to "selling" tax exemption. Congress already has shown its distaste for the many sell-lease-back deals that business has made—with tax-exempt organizations such as educational institutions and foundations. Last year the tax laws were changed considerably to make such deals less profitable to all concerned.

As things stand now, rents paid by a manufacturing company to a city for a plant probably don't represent taxable income. But that may not always be the case. If enough local governments go into the "industrial plant renting business," Congress may change things. (After all, the leaser of such a plant acquires a competitive advantage over others in his line.) And taxes could well mean that the rental payments that originally seemed sufficient to amortize outstanding revenue bonds might fall short.

Moreover, if it is legal for a city to build a plant for an industrial company, why isn't it just as legal for it to engage in industrial sell-lease-back deals or to handle commercial and residential properties the same way? Obviously, such a move, if carried to the extreme, would be likely to undermine the taxing power and the general credit of any city attempting it. Even more important, the start of any such general trend could well touch off a renewed effort in Washington to end tax-exemption of all municipal issues.

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Cry for Flood Insurance

It may be answered by private companies, but more likely by the government. Risk is high, customers limited. Premiums would have to be steep.

Tremendous damage caused by the Kansas City flood of last July (BW—Jul.21'51,p24;Aug.4'51,p25) has caused an outcry in the stricken area for flood insurance on real estate. But it doesn't look as if this insurance will be forthcoming unless the government gets into the act in a big way.

A late estimate puts flood damage in the Kansas City area alone at $500-million. Only about $3-million of this is covered by insurance, practically none of it on fixed property. Most of this amount will be paid on inland marine policies, which provide comprehensive protection for property in transit, such as freight in trains or trucks. And some will be paid on automobiles insured by comprehensive physical-damage policies.

• **Bad Risk**—Up to now, insurance companies have steered away from flood insurance on real estate. The only potential customers for it are those people who live near rivers, lakes, and the seafront. And their chances of having a flood some time are pretty good. Underwriters don't like to insure against perils that are so concentrated in their effect. It doesn't give them a sufficiently large "spread" of risks.

Furthermore, the underwriters have considered it impossible to predict, even approximately, the amount of damage that may be caused by future floods. That makes it pretty hard to set premium rates.

• **Working On It**—But the demand for this coverage by Kansas City people has convinced the insurance industry that it ought to take another look at flood insurance. The Insurance Executives Assn., an industry group that studies long-range problems, is going to see if it can't work out some form of protection that might be provided by private companies.

However, only one insurance executive has spoken out optimistically on the subject. And he emphasizes that everything depends on how effectively the federal and state government can control inland floods. Morton T. Jones, president of the Kansas City Fire & Marine Insurance Co., thinks insurance companies could sell flood insurance only if present flood potentialities were greatly cut down by government projects.

• **Government's Part**—Jones also indicates two other ways to provide flood insurance, if private companies can't do it. Both heavily involve the federal government:

• The U.S. could set up a Flood Damage Corp., similar to the War Damage Corp. of World War II, which sold war damage insurance through private insurance companies to those who wanted to buy it (BW—Aug.11 '51,p126).

• The government could sell the insurance directly.

Insurance men say that government flood insurance would have to be sold at very high rates if the project was to stay out of the red. And flood control would have to become a lot more effective. Another $500-million loss like Kansas City's could make even the government squirm.

FINANCE BRIEFS

The World Bank will soon hit the market with another huge new issue. Expected this month or next is an offering of about $100-million of additional long-term bonds. This would hike the bank's outstanding funded debt to $437-million.

•

Life insurance companies in the U.S. have paid out about $10-million on death claims covering Korean War casualties. The Institute of Life Insurance reports that over 8,000 policies were involved. However, such payments accounted for less than 1% of all death benefit payments in that period.

•

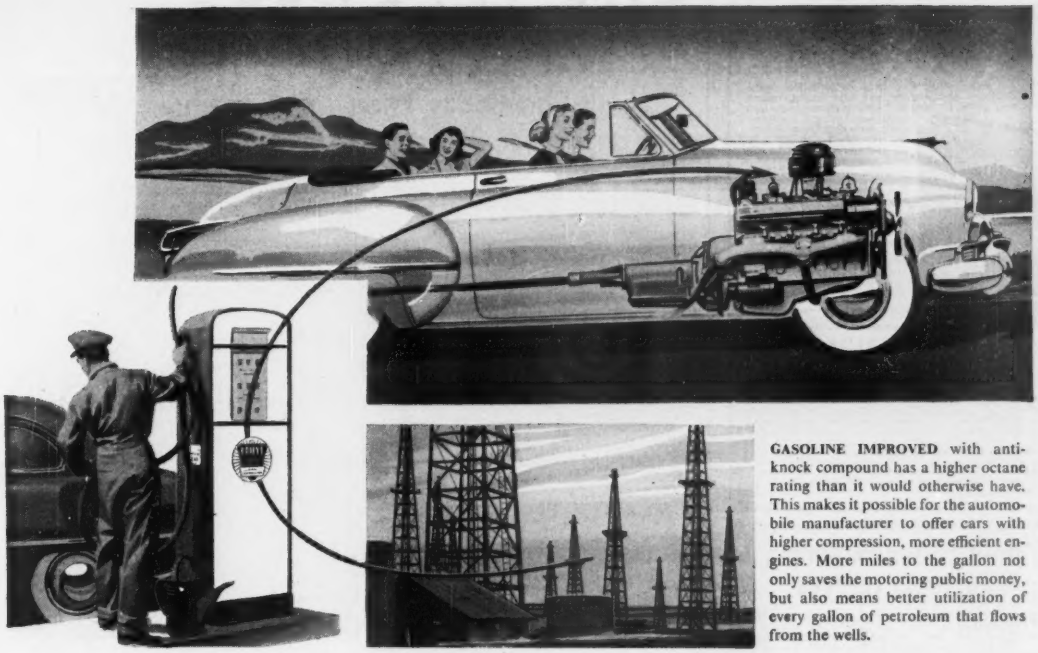
Wisconsin liberalized its policy regulating investment of the state's $138-million of retirement funds. Managers of these funds are now allowed to invest up to 15% in common stocks. The old limit: 5%.

•

Recent offer of Warner Bros. Pictures, Inc., to buy in 1-million shares of its common stock at prices not exceeding $15 (BW—Jul.14'51,p114) proved successful. Tenders of 1,015,905 shares—about 15% of all stock outstanding—were accepted. About two-thirds of block was offered for repurchase at less than $15.

•

Deposits of the nation's 529 mutual savings banks hit a new record in July: nearly $20.5-billion. That was an increase of $57-million during the month. In the corresponding month of 1950, during Korea scare buying, deposits decreased nearly $44-million.



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Of course, you might not apply the extra quality of gasoline "B" solely to increasing mileage. You might prefer it to drive a heavier car, carry a bigger load, or get better performance.

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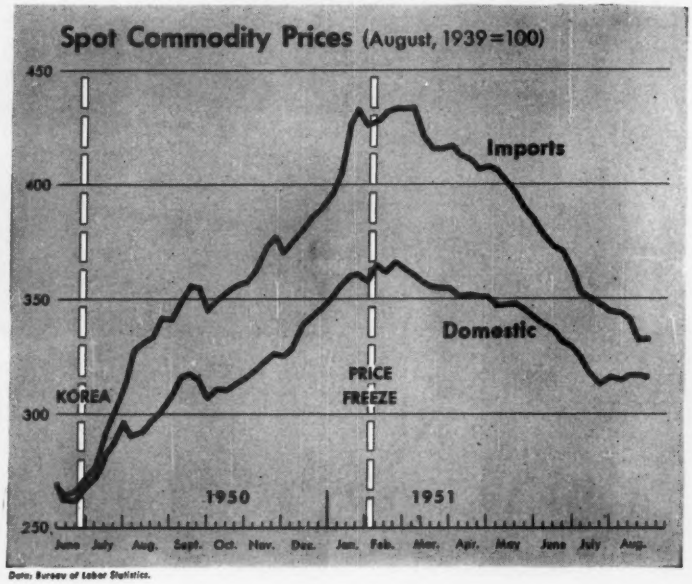

Data: Bureau of Labor Statistics.

Commodity Price Toboggan

Imported raw materials have gone down even faster than domestic since February. Heavy stocks in all but metals blamed, rather than imposition of price controls.

This year's deflation in commodity prices has hit imported commodities even harder than it has the domestic ones (chart, above). But then, the imported products had quite a lot farther to fall.

The Bureau of Labor Statistics, which keeps indexes of spot commodity prices, distinguishes between U.S. prices of imported commodities like tin, rubber, burlap, silk, cocoa, and coffee, and prices of domestic raw materials like corn, wheat, cotton, steers, and steel scrap.

• **Even Start**—When the Korean crisis started, both indexes were at almost exactly the same level. Both climbed fast after Korea, but the price index of imported commodities climbed somewhat faster.

That was because U.S. buyers were worried about possible shortages of shipping space. And products like Malayan tin and crude rubber might have been cut off completely if war had spread in the Far East.

After the successful U.N. landing at Inchon in September, commodity prices dropped sharply as buyers looked for a rapid finish to the Korean War.

But when the Chinese came into the picture, both price indexes started on a long climb that didn't top off until last February. It was then that deflation began in the United States in consumer goods.

Although the deflation in commodity prices didn't get started till after the price freeze had gone into effect, there hasn't been much connection between price control and lower prices.

• **Big Stocks**—One big reason for the price drop was that buyers at all levels—consumers, retailers, manufacturers—realized that the pattern of World War II wasn't going to repeat itself, at least not right away (BW—Jul.21'51,p108). By that time, they were heavily stocked up on most commodities, except metals. U.S. buyers had been especially anxious to get imported raw materials. So prices of a lot of imported commodities dropped faster than prices of the domestic ones.

Naturally, price control couldn't have affected prices of some imported commodities, anyway. But in the case of others, like wool, price control could have had considerable effect because it put a limit on the price at which U.S.

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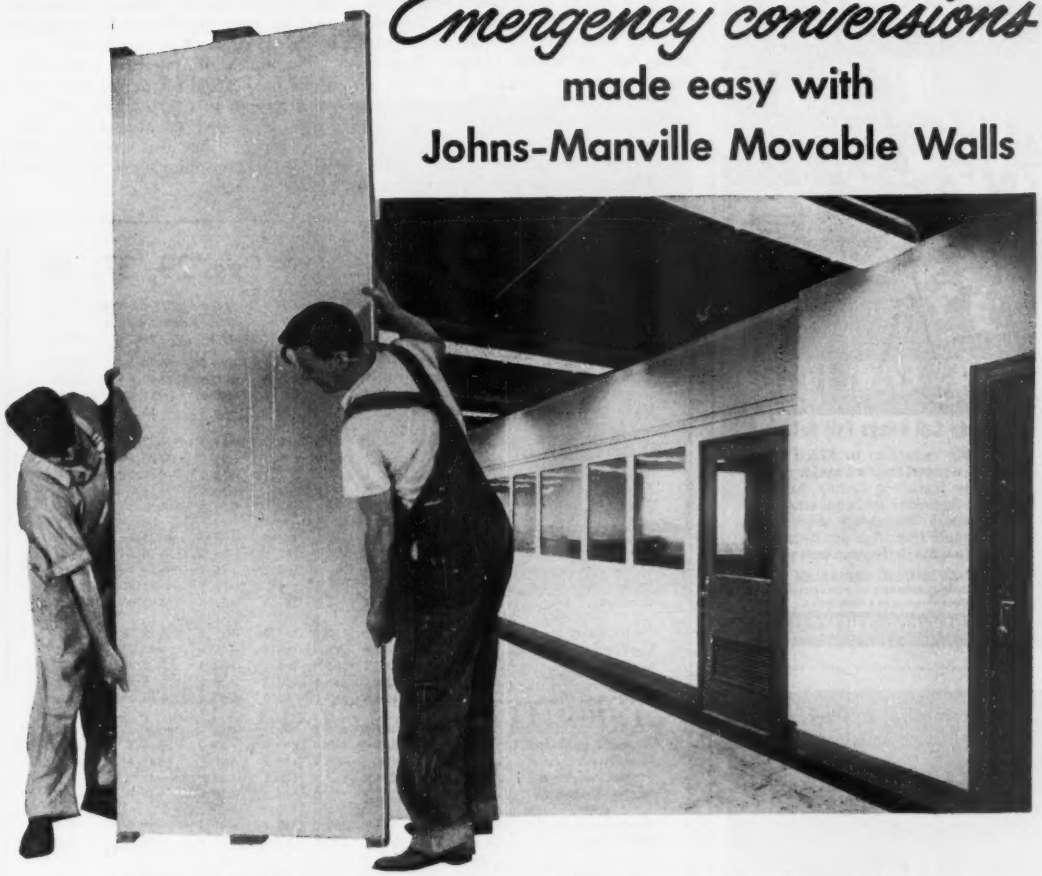

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textile men could buy wool and still make a profit on finished goods.

In the case of rubber and tin, where the U. S. is the main buyer and where there was no letup in demand, the government took over as sole U. S. purchaser on the world market. Rubber was taken over in January; tin in March. That brought prices of these two key imports down in a hurry.

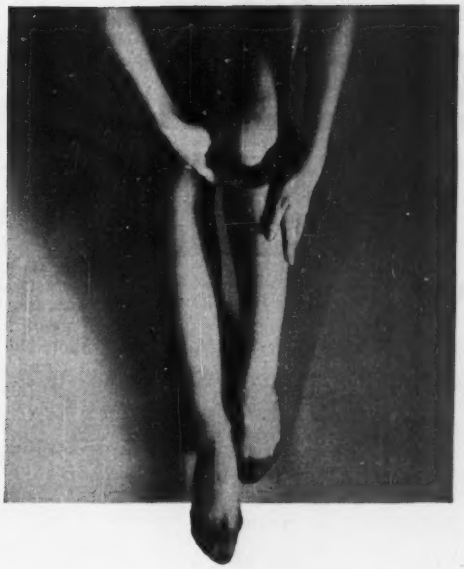
• **Leveling Off**—In the last few weeks the decline in domestic commodity prices has begun to level off. That may be partly due to a revival of buying interest.

But some of this leveling is due to the fact that several domestic farm commodities have dipped nearly to support levels. They can't go much lower.

The index of imported commodity prices has leveled off in the past week as price rises in sugar, cocoa, and burlap have helped counteract the long-term decline. But this week the price of wool was dropping again on the Australian market.

Bull Market Comparison: 1951 vs. '29, '37, '46

Stock Groups	Standard & Poor's Weekly Indexes (1935-39 = 100) 1929 High	1937 High	1946 High	Recent Level	Recent Levels vs. 1929	1937	1946
Composite Index	**240.9**	**139.8**	**186.6**	**181.1**	**-24.8%**	**+29.5%**	**+14.2%**
Industrial Index	**197.7**	**140.7**	**163.2**	**197.8**	**+ 0.1**	**+40.6**	**+21.2**
Railroad Index	**460.2**	**171.1**	**168.8**	**144.5**	**-68.6**	**-15.5**	**-14.4**
Utility Index	**386.0**	**136.0**	**132.3**	**114.8**	**-70.3**	**-15.6**	**-13.2**
Agricultural machinery	194.1	177.1	160.5	171.9	-11.4	- 2.9	+ 7.1
Aircraft manufacturing	385.4	140.7	183.1	169.0	-56.1	+20.1	- 7.7
Air transport	332.1	169.5	624.3	361.3	+ 8.8	+113.2	-42.1
Automobiles	210.6	155.9	166.0	188.9	-10.3	+21.2	+13.8
Auto parts, accessories	247.4	151.0	170.2	151.4	-38.8	+ 0.3	-11.0
Bituminous coal	361.1	131.1	248.1	421.5	+16.7	+221.5	+69.9
Building materials	209.2	146.5	161.8	159.3	-23.9	+ 8.7	- 1.5
Capital goods stocks	215.3	153.7	147.0	190.2	-11.7	+23.7	+29.4
Carpets, rugs	346.6	197.0	291.1	134.5	-61.2	-31.7	-53.8
Chemicals	158.4	130.5	151.8	253.1	+59.8	+93.9	+66.7
Confectionery	105.8	107.1	130.5	123.9	+17.1	+15.7	- 5.1
Consumer goods stocks	201.1	131.2	175.8	168.2	-16.4	+28.2	- 4.3
Cotton goods	151.6	157.2	261.9	295.2	+94.7	+87.8	+12.7
Copper	244.7	188.7	147.1	170.2	-30.4	- 9.8	+15.7
Department stores	342.3	160.9	345.8	268.9	-21.4	+67.1	-22.2
Distillers	186.7	139.0	633.8	459.1	+145.9	+230.3	-27.6
Electrical equipment	239.6	138.0	133.3	150.9	-37.0	- 4.5	-13.2
Fertilizers	347.0	168.3	305.4	440.7	+27.0	+161.9	+44.3
Finance companies	97.8	139.8	113.1	123.1	+25.9	-11.9	+ 8.8
5¢, 10¢, $1 chains	205.4	143.2	156.9	126.1	-38.6	-11.9	-19.6
Food companies	254.3	124.6	163.0	149.2	-41.3	+19.7	- 8.5
Food chains	413.1	120.0	248.6	237.7	-42.5	+98.1	- 4.4
Glass containers	63.0	151.0	162.9	147.2	+133.7	- 2.5	- 9.6
Gold mining (U. S.)	.....	121.3	106.8	60.9	.....	-49.8	-43.0
High-grade commons	.....	121.4	135.5	148.0	.....	+21.9	+ 9.2
Lead, zinc	164.1	170.2	139.7	129.6	-21.0	-23.9	- 7.2
Leather	310.3	187.0	221.9	186.9	-39.8	- 0.1	-15.8
Low-priced commons	333.5	200.6	315.7	195.6	-41.3	- 2.5	-38.0
Machinery	150.0	160.0	154.6	161.9	+ 7.9	+ 1.2	+ 4.7
Mail order, general chains	272.7	144.2	241.1	240.3	-11.9	+66.6	- 0.3
Metal containers	138.1	127.7	94.0	90.9	-34.2	-28.8	- 3.3
Metal fabricating	504.5	196.7	178.2	161.6	-68.0	-17.8	- 9.3
Mining, smelting	161.4	159.0	113.0	119.6	-25.9	-24.8	+ 5.8
Motion pictures	773.5	170.5	350.3	161.8	-79.1	- 5.1	-53.8
Office, business equipment	297.0	141.1	165.1	232.5	-21.7	+64.8	+40.8
Oil	177.4	145.9	169.8	295.1	+66.3	+102.3	+73.8
Paper	274.3	237.4	328.6	601.0	+119.1	+153.2	+82.9
Printing, publishing	621.9	168.4	285.5	113.1	-88.1	-32.8	-60.4
Rail equipment	290.9	176.3	153.5	101.2	-65.2	-42.6	-34.1
Rayon	320.5	159.6	376.4	608.2	+89.8	+281.1	+61.6
Shipbuilding	130.4	132.1	244.7	219.1	+68.0	+65.9	-10.5
Shipping	448.6	176.9	459.7	448.8	+0.01	+153.7	- 2.4
Shoes	176.0	117.7	244.7	115.5	-34.4	- 1.9	-20.2
Soft drinks	44.5	150.1	188.4	101.0	+127.0	-32.7	-46.4
Steel	316.4	184.6	159.5	208.4	-34.1	+12.9	+30.7
Sugar	165.7	144.0	151.3	127.6	-23.0	-11.4	-15.7
Tires, rubber goods	353.9	191.4	307.4	415.0	+17.3	+116.8	+35.0
Tobacco	119.4	119.5	105.1	76.6	-35.8	-35.9	-27.1
Woolens	218.6	182.7	279.2	135.6	-38.0	-25.8	-51.4



NYLONS... MADE WITH BRICK

• Those gossamer threads were once a lump of coal, baking in the fierce heat of a coke-oven . . . an oven lined with refractory brick, the only material capable of withstanding such temperatures, which often exceed 3000 degrees.

Containing heat is refractories' job. In blast and open hearth furnaces to make iron and steel; in smelters of copper and zinc; in making glass and chemicals; in the fireboxes of locomotives; in your own fireplace at home.

Without refractory brick there would be no heat, light and power; no metals, no manufacturing, no transportation as we know them today . . . and no nylons.

The duties refractories are called upon to perform are so many and varied . . . the demands upon their performance are so constantly increasing in severity . . . manufacturing them calls for the highest expression of the physical and chemical sciences.

Refractories are literally sold on prescription. For the right ones lead to finer products, lower costs . . . the wrong ones to waste. General Refractories providing a complete refractories service, is in a position to prescribe the right ones for your business . . . and supply them.

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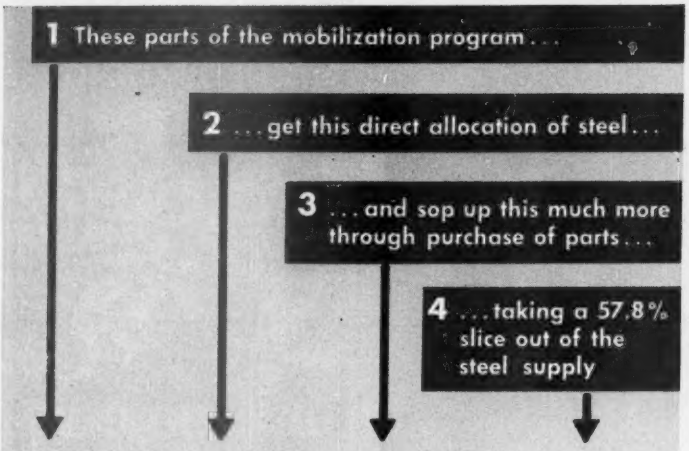
PHILADELPHIA

DEFENSE BUSINESS


1 These parts of the mobilization program...
2 ...get this direct allocation of steel...
3 ...and sop up this much more through purchase of parts...
4 ...taking a 57.8% slice out of the steel supply

Weapons	2,162,037 tons	1,285,400 tons	16.0%
Power, Fuel	2,139,426	1,285,400	16.0%
Transport	2,113,425	1,285,400	16.0%
Construction	588,000	347,000	4.5%
Minerals	41,395	25,708	0.3%
Export	676,000	398,474	5.0%
TOTAL	7,720,283	4,627,382	57.8%

Need Hard Facts on Steel

CMP managers vow to get cold facts on steel used in defense components. Gap in firm figures exposes whole allocation program to sniping by critics.

The tabulation above represents all the statistics the mobilization planners have to guide them in steel allocations. And there's a soft spot in the table. The second column of figures is admittedly a guess, and it's driving the planners wild.

There's no argument about the amount of metal allocated directly to the military and the defense-supporting industries. That amount is announced each quarter. What the planners can't prove is how much additional metal is used for weapons and defense industries in the form of components and MRO supplies.

It's a lack in data that exposes the planners to all sorts of potshots. And before allocations are made for the first quarter of 1952 the mobilizers intend to arm themselves with the missing information.

• **Think They Know**—They're confident of what the answer will be. They know that weapons and defense-supporting industries take about 36% of direct steel allocations. That amounts to 7.7-million tons in the fourth quarter. If they also take another 36% of the components manufactured, it means they will be using an additional 4.6-million tons of steel. It boils down to 58% of steel over-all.

If these figures can be justified—and there's doubt only about the steel used in components—planners think they have the clincher for continued tight controls.

• **But Aren't Sure Now**—As it is now, though, government is half-helpless in the face of skepticism in important segments of industry. Some steel producers, for example, have repeatedly asserted that we don't need CMP to distribute metal when the direct military take is running less than 10% of supply.

It's an effective argument. The metals allocaters haven't been able to answer it except in generalities, since they don't know for sure about how much metal goes indirectly into defense work.

Allocations are coming under two new attacks right now. Walter Reuther and the CIO are pressing for more metal for autos and other civilian goods. And the Senate Small Business Committee says the CMP way of handing out metal is hurting the people it speaks for.

The generalized retort by the CMP managers is that for every two tons of steel allocated directly another ton is drawn into mobilization indirectly.

• **For Example**—Take weapons. Carbon steel allocated directly to Defense Dept. for the fourth quarter is only 8.5% of supply. Even if you add in AEC and a little that goes to the Secretary of the Army, you still have only 10% of supply. But additional steel goes into weapons in the form of small motors, bearings, compressors—the whole line of components.

No record is kept of materials for these. They are made under CMP as Class B products and get separate allocations. NPA knows how much steel goes into components in general—but not how much goes into components purchased for weapons.

OPS Juggles Names To Reduce Paper Work

The Office of Price Stabilization has changed the classification of some products from chemical to mineral.

The switch is mostly name-juggling. But it does eliminate some paper work. As chemicals, these products come under Ceiling Price Regulation 22—which permits the addition of cost increases to a pre-Korean War base price period.

As nonmetallic minerals the commodities will go back to the General Ceiling Price Regulation—the so-called "freeze" of last January, which allows use of the highest price charged between Dec. 19, 1950, and Jan. 25, 1951.

• **The List**—Products affected are: refined salt; sodium silicofluoride; butadiene derived from nonpetroleum sources; carbon black of the channel, furnace, and thermal types; and, when derived from hardwood distillation, wood tar products, pyroligneous acid, acetic acid, acetate of lime, and methyl alcohol.

Since CPR 22 (page 21) has not yet gone into effect, the decision will not alter the present ceiling price. The big practical effect will be to relieve producers from the necessity of filing for ceiling prices under CPR 22.

How Honeywell Controls help put the Wonder Drugs in the reach of all who need them

Remember the early days of penicillin, aureomycin and the other Wonder Drugs? Even then they promised relief to millions of sufferers. But—they could be produced only in scientists' laboratories. So the output was tiny, the prices prohibitive.

What a contrast with the picture today! Now, the Wonder Drugs are plentiful, moderate in cost—literally "in reach of *all* who need them"!

To make this change, America's drug industry solved mass production problems that seemed impossible. For example, they had to guarantee absolute sterility throughout the complicated process. And they had to hold temperatures, pressures, degrees of acidity or alkalinity within very narrow ranges. To help meet these rigid standards, many drug companies use sensitive controls and instruments engineered by Honeywell's Industrial Division.

Working with industry is just one way in which Honeywell helps you live better, work better. You'll also find Honeywell controls in planes, ships and buses—in homes, schools, and commercial buildings where the familiar thermostat helps guard America's health and comfort.

This is the age of Automatic Control—everywhere you turn.

And Honeywell has been the leader in *controls* for more than 60 years.

America lives better—works better—with Honeywell Controls

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Puzzle in Controls

Fourth-quarter applications for CMP materials were only a little more than half what NPA expected. Are industry inventories too big? Are companies apathetic about plan?

National Production Authority was braced for all kinds of trouble when it came to parceling out allotments of steel, copper, and aluminum for the fourth quarter. But the one thing the agency hadn't counted on happened: Instead of the anticipated 50,000 odd applications due under the Controlled Materials Plan, NPA had only about 40,000 by the Aug. 15 deadline.

Planners shoveled penny postal cards by the thousands into the mail to find out why. An answer was vital to NPA. It had to know whether industry just wouldn't work with CMP or whether it was getting all the metal it needed independent of the plan.

• **Not So**—Early replies to the postal card inquiry were reassuring:

• Many makers of consumer durables, who are coming into CMP in the fourth quarter for the first time, wired back "First we ever heard of it." This, in spite of the agency's press releases, broadcasts, and spot announcements.

• Other companies assumed that advance fourth-quarter allotments were all they were going to get. (When third-quarter allotments were issued, CMP also issued advance allotments—70% of the third-quarter handout—for the fourth quarter.)

• **Demand Dropping?**—CMP officials think that excessive inventories may account for some of the decline in applications. The agency was disappointed when third-quarter applications didn't disclose a lot of metal over the legal limits. Now CMP thinks that some companies have decided not to take any further risk; they'll work off their inventories before applying for any more metal.

Actually, though, the answers showed that the dropoff in applications was mostly a paper-work problem. It represented little, if any, dip in demand for metal.

However, the failure of such a large number of businesses to file suggests that industry is not sold on the necessity for full CMP control. Widespread violations at the time the third-quarter allotments were issued (BW—Aug. 11'51,p132) raised that suspicion. The feeling that controls are pointless and not likely to last might account for the apathy in filing fourth-quarter applications.

• **Two-Way Door**—NPA knows that its last-minute jog by postal card will still leave a lot of nonfilers. Against them, it has firmly slammed shut the materials gate with a series of amendments to its basic orders. But at the same time it has quietly left open a side door. Most of the companies that failed to file are still going to get metal one way or another—and with the blessing of the agency.

The gate-slamming centered in an order that instructed producers of controlled materials—steel, copper, and aluminum in stated types and forms—to reject all nonrated orders after Sept. 10. Rated orders are issued by CMP in response to applications. No application, no rated order; no rated order, no controlled materials.

• **Warehouse Bonanza**—On the surface, that would freeze out all nonapplicants. But NPA has no intention of forcing factory doors to close. Its plan is to keep many nonapplicants in business by increasing the amount of controlled materials assigned to warehouses. Most of the nonapplicants are small firms that usually get their metal from warehouses, rather than direct from mills.

Under present rules, producers of CMP materials are required to supply warehouses with 85% as much material as was shipped to them during the first seven months of 1951. Now NPA is preparing an order to raise this mandatory set-aside to as much as 100%.

• **Help for Little Man**—Small business has been plugging for an increase up to 125% in warehouse set-aside. Even if it doesn't get that much, NPA hopes that an increase will end criticism that new controls are squeezing the little fellow. The Senate Small Business Committee already has one new CMP regulation under scrutiny—one that allows producers of controlled materials to select the orders they will accept. Until the agency changed this rule, producers had been accepting orders as received, many of them from customers they had never dealt with. When their order boards were filled, they had to turn down old customers.

With two exceptions, they now can pick what orders they will take. The exceptions are military orders and orders received less than 15 days before they have to close their books for the coming quarter. The new setup means small businesses are going to get tail-end consideration, the committee fears.

• **Complete Controls in Sight**—In the meantime, NPA is plunging ahead into the final phase of complete controls—directives to producers telling them in

"HOW'M I DOIN', DAD?"

LOOKS as though Jimmy slopped almost as much paint on himself as he managed to get on the dog house! Time for Dad to step in and smooth out the "coverage."

For adequate *insurance* coverage—without costly duplication—you'll be wise to talk with your friendly Hardware Mutuals representative. He's thoroughly trained on insurance matters. And what's more, he'll be glad to sit down with you, analyze your particular needs, and work out a Hardware Mutuals "Program Plan" of protection for your auto, home and business.

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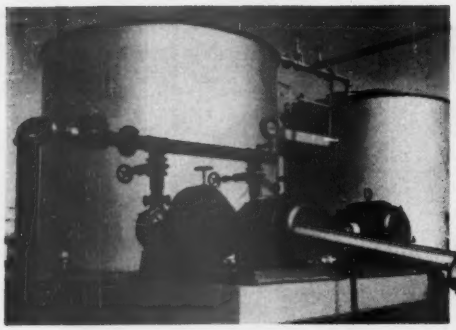
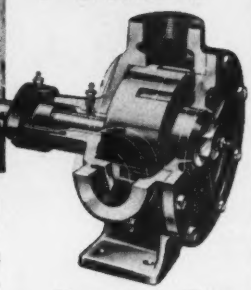


VIKING
Rotary
PUMPS



Cut-away view of a Viking petroleum handling pump.

40 YEARS OF SERVICE TO THE PETROLEUM INDUSTRY

First manufactured in 1911, the growth of Viking pumps has paralleled major developments in the petroleum industry. As changes in methods and conditions came, Viking has developed new models to meet them.

Viking effectively uses its original, simple rotary pumping principle—"a gear within a gear" with only two moving parts—in single or multiple applications of many types.

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THE ORIGINAL "*GEAR-WITHIN-A-GEAR*" ROTARY PUMP

They knew *something was in the air!*

When Ford pried the lid off this box, a revolutionary new way to pack auto parts came to light. Custom was to spray bare metal surfaces with grease or oil. Then, before parts were usable, they had to have a "hot bath." But after 3 months of open storage with only Angier VPI* Wrap to line this box, the floor pans came out shiny and clean. "No evidence of rust" said Ford's Export Division.

Because VPI takes the rust-making power out of air and moisture, you *know* when this invisible vapor is in the air. Today 8 big names in the automobile world are saving priceless manhours and valuable floor space with Angier VPI Wrap. It stands to reason that this *proven* vapor method can stop rust for *you!* Write: Angier Corporation, Framingham 7, Mass.

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detail just how much of each type of controlled material they must turn out. These directives will be issued from now to yearend. When they are in effect, the CMP train will be complete, as far as the planners are concerned.

CHECKLIST: Defense Regulations

The following listing and condensed description cover all the materials and price-control regulations issued by the defense agencies during the preceding week.

Full texts of the materials orders may be obtained from the National Production Authority, Washington 25, or from any Dept. of Commerce regional office.

Full texts of the price orders may be had from the Office of Price Stabilization, Washington 25, or from the regional OPS office in your area.

Materials Orders

Electric utilities: Provides electric utilities with fourth-quarter allotments of controlled materials and advance authorizations of allotments for the first three quarters of 1952. M-50 as amended (Aug. 21).

Laboratories: Provides authority for a specified class of laboratories to obtain small quantities of steel, copper, aluminum, and other materials by self-certification of their orders or by quota assigned by NPA. M-71 as amended (Aug. 23).

Conversion to ACM orders: Provides additional time for conversion of unrated orders to authorized controlled materials orders for fourth-quarter delivery of steel, copper, and aluminum. CMP Reg. 3, Dir. 3; M-1, Dir. 3 and 4; M-11, Dir. 2 and 3; M-5, Dir. 1 and 2 (Aug. 21).

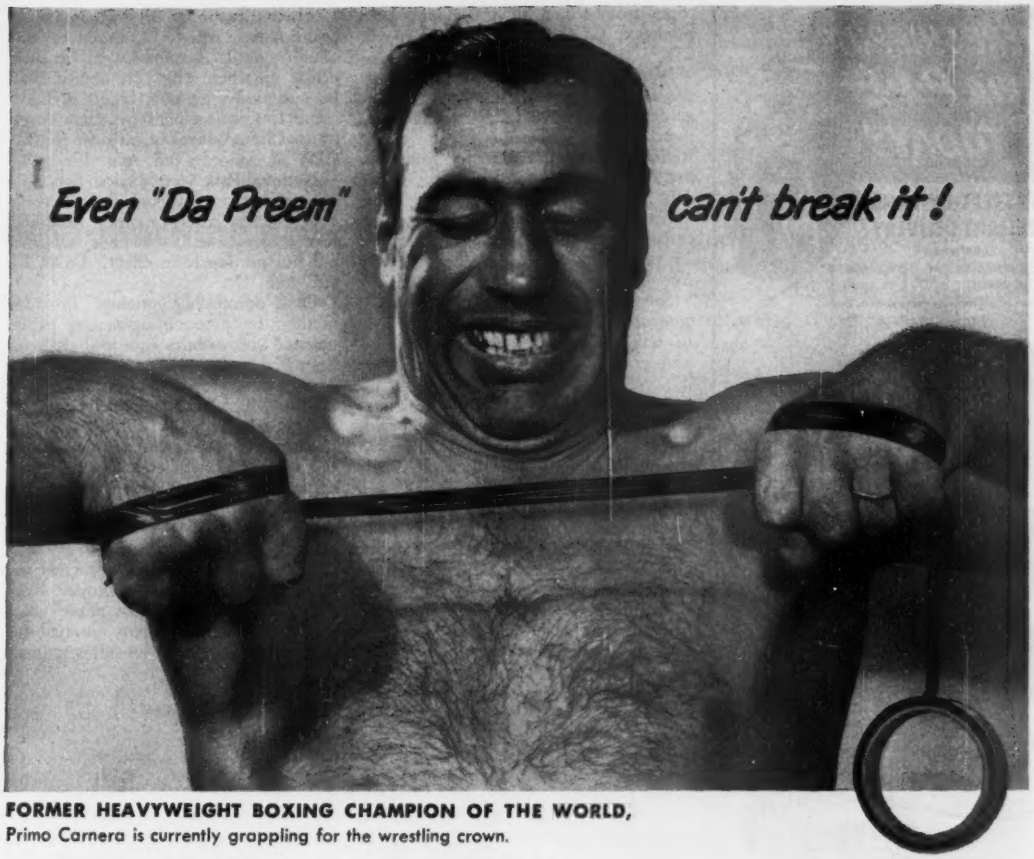
Basic CMP rules: Provides for disposition of controlled materials or Class A products that a manufacturer has on hand, but which he cannot use for purposes permitted by regulation. CMP Reg. 1, Amdt. 3 and Dir. 6 (Aug. 22).

Cans: Outlines 12-month program of production and use of cans. M-25, amended (Aug. 23).

Pipe shipments to flood area: Authorizes increased shipments of pipe to the Missouri-Kansas-Oklahoma flood area, including main line pipes for gas, oil, and water and the smaller sizes used for these purposes in home and business places. M-6, Dir. 3 (Aug. 24).

Pricing Orders

Stamped envelopes and paper: Exempts from price control sales of stamped government envelopes and



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Primo Carnera is currently grappling for the wrestling crown.

World's strongest tape?

TALK ABOUT STRONG! This sinewy strip of "Scotch" Brand Filament Tape No. 880 is just one inch wide, yet all the power of a 262-pound, 6½-foot giant doesn't snap it.

Talk about tough! It shrugs off knockout punches from swinging test pendulums—brutal blows that would drop a steer. Strapped around heavyweight shipping cartons, it stands up like a champion under torture tests more punishing than the roughest handling in shipment —and it sticks to the job.

WHAT MAKES IT SO STRONG—so tough? Rayon filament "muscles"—more than 5,000 of them running continuously the length of the tape—reinforce it like steel bars in concrete, and as steel cables support a suspension bridge. And these filaments are embedded in an elastic, pressure-sensitive adhesive that "gives" under shocks, bounces back to hold tightly after repeated strains.

"Scotch" Brand Filament Tape No. 880 gives you 5 times the tensile strength, 50 times the tear-resistance of most packaging tapes previously available. In the past several years, filament tape has consistently demonstrated that it will lower total packaging costs, reduce labor requirements as much as 75%.

Note to shippers:

Many leading manufacturers have found "SCOTCH" Brand Filament Tape ideal for packing, shipping and material handling operations. We suggest you include it in your future plans. For further information, write: Minnesota Mining and Manufacturing Co., St. Paul 6, Minn.

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paper from which such envelopes are produced. GOR 2, Amdt. 3 (eff. Aug. 25).

Nonmetallic minerals: Eliminates crude salt as one of commodities regarded as a nonmetallic mineral and inserts sodium chloride in its stead. Refined salt is also eliminated from the list. CPR 22, Amdt. 1, Int. 33 (eff. Aug. 20).

Antique automobiles: Removes price controls from all automobiles more than 25 years old. GOR 9, Amdt. 5 (eff. Aug. 20).

Salvation Army: Exempts from price controls sales of articles of personal use to Salvation Army officers and employees. GOR 6, Amdt. 4 (eff. Aug. 20).

Military ships: Adds ships designed for military needs exclusively and sold to defense agencies to list of commodities free from price control. GOR 9, Amdt. 6 (eff. Aug. 20).

Service trades: Extends applicability of the service trades order to Alaska, Guam, Hawaii, Puerto Rico, Samoa, and the Virgin Islands. CPR 34, Amdt. 1 (eff. Aug. 25).

Anthracite coal: Requires producers of anthracite coal who make charges for special services and pocket charges to file reports to OPS. CPR 4, Amdt. 2 (eff. Aug. 25).

Machinery resellers: Permits resellers of machinery and related goods their traditional percentage markups over cost. CPR 67 (eff. Aug. 27).

Scrap rubber: Provides that scrap purchased prior to July 30, and received by the dealer prior to Aug. 6, can be sold at the contract prices, where the purchase price, plus transportation costs, exceed the spelled-out ceiling prices. Dealer must have delivered or placed the scrap in transit by Aug. 13. CPR 59, Amdt. 1 (eff. Aug. 13).

Machine tools: Permits manufacturers to increase base-period prices 12% in determining ceiling prices. Also allows manufacturers to reflect increases in labor and material costs between end of base period and Sept. 10, 1951. CPR 30, SR 2, Rev. 1 (eff. Aug. 27).

Chemicals: Removes certain chemical products, such as sodium silicofluoride, sulfur, butadiene, carbon black, etc., from CPR 22 leaving them under the General Ceiling Price Regulation. Also excludes from all price control butadiene derived from nonpetroleum sources when sold for use in making synthetic rubber. CPR 22, Amdt. 23; GOR 3, Amdt. 2 (eff. Aug. 25).

Dry cleaning: Permits wholesalers of dry cleaning, finishing, and dyeing services in Westchester County, N. Y., to revert to prices prevailing before June 14. CPR 34, SR 1, Amdt. 1 (eff. Aug. 25).

Machinery: Redefines "manufacturer" to read: "Any person who sells a commodity under his own brand or trade name, where he produces the same or similar commodity in his own plant, or where the commodity that he sells under his own brand or trade name is a replacement for a commodity that he produces in his own plant." CPR 30, Amdt. 8 (eff. Aug. 27).

National Park Service sales: Sets ceiling prices for National Park Service concessioners based on prices specified in contracts or rate schedules for 1951 but not previously in effect. GOR 17 (eff. Aug. 27).

Used automobile pricing: Provides method for determining ceiling prices on used automobiles equipped with refrigerated air-conditioning unit or equipped with special body or engine. GCPR, SR. 5, Amdt. 5 (eff. Aug. 27).

Tire carcasses: Permits tire recappers and retreaders to include the retail instead of wholesale price of carcasses in computing ceiling prices for sales of recapped and retreaded tires to dealers. GCPR, SR 49, Amdt. 1 (eff. Aug. 27).

Grocery store pricing: Amends retail grocery regulations to provide basis for pricing special promotion sales where two or more items are tied together; extends date for filing adjustment applications by "specialty" retailers; removes tube or bulk butter from regulation; and permits Group 1 stores to reclassify to Group 2. CPR 15, Amdt. 6; CPR 16, Amdt. 6 (eff. Aug. 27).

Wholesale grocery pricing: Extends date for filing applications by "specialty" wholesalers and established adjustment provisions for "wagon" wholesalers. CPR 14, Amdt. 5 (eff. Aug. 27).

Brass mill products: Establishes ceiling prices for brass mill products sold by producers with plus or minus adjustments to reflect all customary quantity differentials, extras, allowances, discounts, etc., in effect on Dec. 31, 1950. CPR 68; CPR 30, Amdt. 9 (eff. Aug. 23).

Sodium silicofluoride: Sets dollars-and-cents ceilings on this commodity, applicable to manufacturers whose present ceiling prices are lower than the new spelled-out prices and to new manufacturers. GCPR, SR 50 (eff. Aug. 28).

Processed fruits and vegetables: Sets forth method by which processors may determine temporary ceiling prices for the 1951 pack of canned and frozen vegetables, fruits, and juices, and canned soups that are not yet covered by specific ceiling price regulations. GCPR, SR 51 (eff. Aug. 20).

Contract motor carriers: Authorizes adjustment, under certain conditions, of rates for contract motor carriers transporting liquid commodities, except milk, in tank trucks. GCPR, SR 52 (eff. Aug. 29).

Wholesale beef: Modifies effective

New-machine accuracy from war-built Warner & Swasey turret lathes!

● This story comes from the REEVES INSTRUMENT CORPORATION of New York City, a company manufacturing precision computers and instruments. Reeves tells us that they still maintain .0005" accuracy from eight Warner & Swasey No. 3, 4, and 5 Turret Lathes purchased during World War II!

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Warner & Swasey Turret Lathes at Reeves Instrument Corporation, New York City

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date of prohibition against importation of beef at prices higher than domestic ceilings to permit contracts entered into before Aug. 1, 1951, to be carried out, if the deliveries are made on or before Aug. 31, 1951. CPR 24, Amdt. 5 (eff. Aug. 25).

Truman Names Four To Renegotiation Board

At long last, President Truman got around to submitting some names for the Renegotiation Board—the top agency in the government's program for limiting profits on defense contracts. But even though he's had since Mar. 23 to select the men for the job, only four of the five members were named, with no Army representative. And no chairman or vice-chairman was appointed.

From the Pentagon, Truman got John T. Koehler and Frank L. Roberts. Koehler is Assistant Secretary of the Navy, in charge of procurement.

Roberts, the second Pentagon man—and logical choice for board chairman—is currently head of the Military Renegotiation Policy and Review Board. He was a star witness at early hearings on the new Renegotiation Act, is probably the government's top authority on renegotiation of military contracts. He's the Air Force nominee.

From the General Services Administration, Truman named John Hubbard Joss and Lawrence E. Hartwig. Joss, now special assistant to Jess Larson, was formerly general counsel for War Assets during Larson's tenure as War Assets administrator. He's a former all-American end from Yale. He began his government career in the ration enforcement division of OPA.

Hartwig is chairman of the Contract Appeals Board of GSA.

Truman's failure to name a fifth member and to designate a chairman is causing considerable speculation. The President was generally expected to designate a chairman at the time of nomination.

The Pictures—Cover by Dick Wolters. Acme—125 (bot. rt.); Black Star—125 (bot. lt.); Ralph Ernst—90 (top lt., bot. rt.); 91 (top rt., bottom); Bob File—91 (top lt.); Joern Gerdts—80, 81; Int. News—102 (top lt.); Bob Isear—22; Rudolph Leppert, Jr.—102 (lower rt.); Roy Pinny—102 (top rt.); Reni Photos—30; Charles Rotkin—70, 71; U.S. Dept. of Labor—34, 35; Wide World—23; Dick Wolters—76 (top), 102 (lower lt.).

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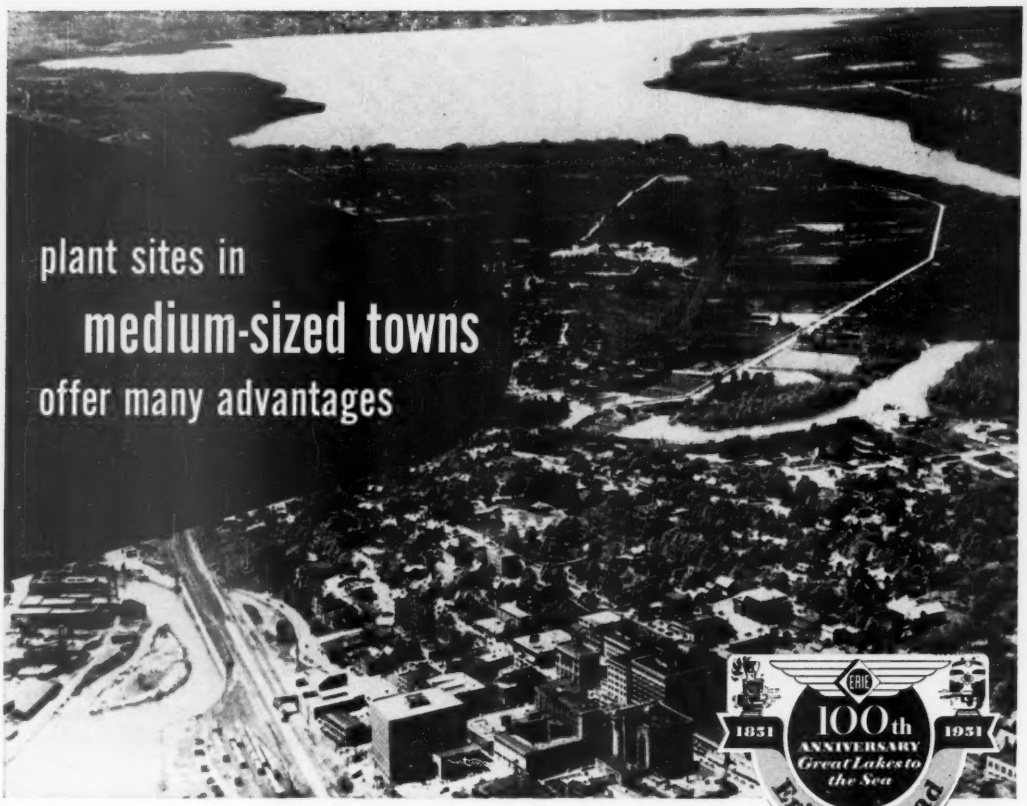

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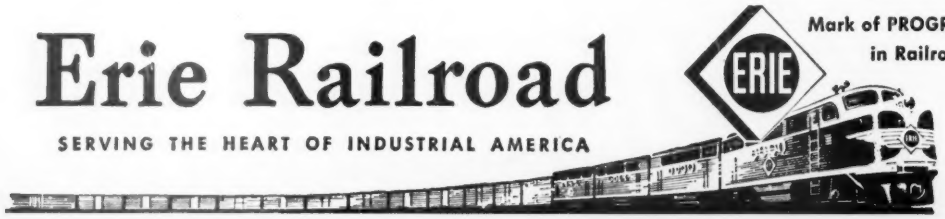

INTERNATIONAL OUTLOOK

BUSINESS WEEK
SEPTEMBER 1, 1951

A BUSINESS WEEK SERVICE

Will Moscow force a September showdown on the West—use the threat of a new Communist offensive in Korea to make the U. S. give up the Japanese peace treaty?

Washington's top Russian experts figure the odds are against this. They admit that Korea is still a red-hot danger spot. But they think that Stalin wants to avoid a general war, that a firm stand by the U. S. now may even force the Kremlin to back away from warlike tactics.

•

The experts aren't counting on such a shift right away, by any means.

In fact, they think there's always the chance that Moscow will misjudge our intentions, stumble into a war it doesn't want.

There are three spots where a Russian miscalculation could quickly put us right on the edge of general war:

Korea. If Gromyko should use Kaesong as a bargaining weapon at San Francisco, look for trouble. The U. S. won't budge. But once Moscow makes a move like this, it will be hard for the Reds to call off the fighting on our terms.

Iran and Yugoslavia are the other places where Stalin might be tempted to move. If he does, the West is sure to step in.

•

Barring developments like these, U. S. experts size things up this way:

Stalin is becoming convinced that propaganda and veiled threats won't halt the West's rearmament. So, short of war, there's only one way Russia can achieve its goal—a genuine peace offensive, backed by proposals that the West will have to take seriously.

Since territorial concessions by Russia are out of the question, a real peace offensive most likely would be mounted on disarmament and atomic control. The Russians could offer these without losing face and could be sure of gaining popular support around the world. To mean anything, though, Moscow would have to propose parity of armaments between East and West, plus adequate international inspection—things the Kremlin has gagged on so far.

•

Chances are the U. S. will get some clue to Russia's intentions from the Japanese peace conference in San Francisco.

Here's what Washington expects Russia's strategy to be:

Gromyko will offer his own draft of a peace treaty. Probably this will (1) forbid rearmament but give Japan a guarantee of neutrality; and (2) provide for profitable trade with China and Russia.

Then he will probably call for a new conference—including Red China—to settle all outstanding Asian conflicts, including Korea.

The key question: Will Gromyko back this line with threats or merely stake out ground so the Communists can try to undermine the Japanese treaty after it's signed?

•

French rearmament is sure to suffer from the big cut the U. S. Congress is making in the foreign aid bill.

But the action on Capitol Hill is no more than the last straw. France itself has failed to take the necessary steps to finance its scheduled arms program. So a drop in France's defense spending was probably in the cards.

Still the French will put as good a face on things as possible. They are sending three top officials to Washington this month—Foreign Minister

Schuman, Finance Minister Mayer, and Defense Minister Bidault. Their job: to get France as big a slice of the foreign aid pie as possible.

•

The British want to be cut in on economic aid, after all. So far London has been slated to get only weapons.

Chancellor Gaitskell's case will be this: The British defense program has reached the stage where all surplus labor and materials are in use. There's no room for further expansion without wrenching workers away from civilian jobs. And that's hard to do when Britain is running a big trade deficit, must try to export more and import less.

Gaitskell also will make this point: Rearmament is much further ahead in Britain than in any Continental country. So Britain can offer a bigger return in arms output for each aid dollar.

If the British Chancellor gets any encouragement from Treasury Secretary Snyder, he may also ask for aid in the form of free dollars—to ease the strain on Britain's balance of payments.

•

German competition is giving British exporters the willies.

West Germany's exports already are 40% above 1936. That's allowing for price changes, too.

True, German exports to all markets are still less than 40% of the British total. But that's a big gain over last year. In the first nine months of 1950, the German figure was only 22% as large as the British.

The European market is where Germany is really making hay. Early this year German shipments to European nations were 180% of Britain's in metal products; 200% in chemicals; 90% in machinery.

In markets outside Europe, the German showing wasn't so good—53% in metal products, 46% in chemicals, 16% in machinery.

•

Since March the German export drive has slowed down some. For one thing, costs have gone up, and prices have followed suit.

The British, too, have lost ground since spring. They are now diverting a lot of output to defense.

About the only thing masking Anglo-German trade rivalry today is the big world demand for hard goods. At the slightest sign of a recession, look for a dramatic trade war.

•

ECA plans to draw U. S. business into a bigger role in boosting Western Europe's productivity.

ECA would make contact between (1) European firms that need financial or technical assistance and (2) American companies that might be interested in offering help. ECA productivity officials will act only as liaison agents and consultants.

Here's the kind of thing ECA hopes to push: licensing contracts, including technical assistance as well as blueprints; long-term technical assistance agreements; extension of credit by U. S. firms that want to push their equipment; purchases of stock in European companies by private individuals in the U. S.

•

Main goal of the new ECA program is to put more private development capital to work in Western Europe. That kind of money is scarce there now.

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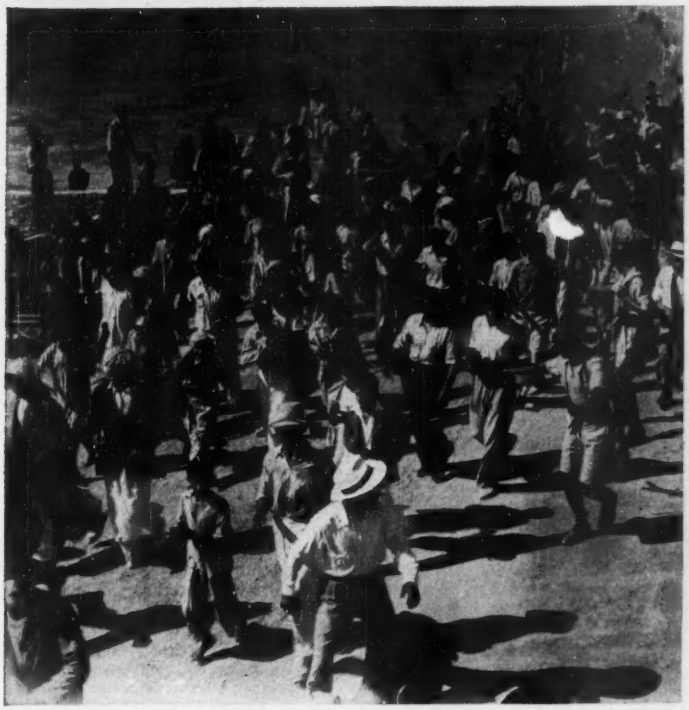


NATIONALISM was whipped up by Premier Mossadegh as a weapon against Britain. In this climate, talks failed, sending home . . .

STOKES, British Lord Privy Seal and special negotiator.

Iran: Still a Chance for Oil Peace

This week in London, W. Averell Harriman is trying to salvage something from the Iranian oil talks. He is working on the assumption that last week's breakdown in Tehran isn't necessarily final.

International oil experts give Harriman a 50-50 chance of still pulling off the peacemaking mission that took him to Tehran more than six weeks ago. But none of the experts now looks for a quick settlement. It may well take several months before London and Tehran will both be ready to make the concessions needed for a deal. In the meantime there's no telling whether there will be a political explosion in Iran that might tempt the Russians to move in.

• **Issues**—Harriman's job in Tehran was to referee the oil debate between Richard Stokes, Britain's Lord Privy Seal, and Iran's Premier Mossadegh. Stokes and Mossadegh split on at least three basic issues: management, monopoly, and the division of profits.

The issue on which the talks finally broke down involved the future role of British managers and technicians in Iran. Stokes offered to set up two new companies to replace the Anglo-Iranian Oil Co. and fit in with a nationalized setup. One company would market the oil, and the other—under nominal control of the Iranian National Oil Co.—would manage the fields and the Abadan refinery.

• **Cloak?**—Mossadegh objected to the management company. He said it was a cloak for continued British control. When Stokes suggested an alternative—a British general manager, working under INOC—Mossadegh balked, perhaps as much as anything because Stokes coupled this offer with an ultimatum: "Accept, or I'll go back to London."

But neither London nor Tehran is likely to let this issue hold up a deal. The British are prepared to see Iran take complete charge of producing the oil so long as refining operations at Abadan stay under their wing. And the Iranians by now are convinced that there is no chance of running this giant refinery without British—or Russian—help.

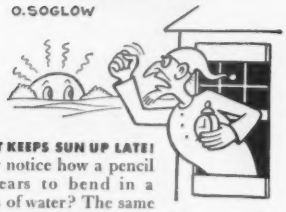
• **Monopoly**—Two other questions are likely to cause the real trouble from now on: (1) How much of Iran's oil would the British get to market through a new company? And (2) how much money would Iran get out of the new setup?

The Stokes proposals would give the British a monopoly on Iranian oil for 25 years. But Mossadegh said Iran would never accept this. He maintains that Anglo-Iranian Oil Co. has held down production in the past to suit its own interests and that this would happen again. So he demanded a free hand to produce as much as INOC wanted and to sell any oil to the highest bidder if the marketing company didn't want it. Apparently the Iranian aim is to establish a free market for oil.

On this point, a compromise also seems possible. If the British are guaranteed a fixed tonnage of oil equal to

AIR-MAZING FACTS

O. SOGLOW



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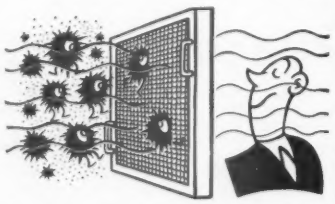

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current output, they would probably agree to let Iran dispose freely of any extra oil from future expansion.

• **Profits Split**—As for the share of profits Iran is to get, Stokes proposed a 50-50 split of anything made by the new marketing company. But Mossadegh objected that, in effect, this was just the old royalty system all over again. Iran would get no more than other Middle East countries that haven't nationalized their oil.

Mossadegh was also suspicious of the British offer to split profits. Stokes said that his proposal would give Iran $130-million to $140-million a year. That would be roughly three times what Iran was getting before the crisis, and twice as much as a British offer the Iranians had rejected in 1949 (BW—Mar.17'51, p145). But the Iranians can't figure how Stokes' offer adds up to 50% of profits. They claim Anglo-Iranian made at least $400-million on Iranian oil last year.

Since Anglo-Iranian has never published its balance sheet, the British are vulnerable to such a charge. And it looks as if they'll have to offer Iran a clear-cut guarantee on this point.

• **Last Ditch**—The British aim is clear enough: To stay in the international oil business in a big way, it needs to control the sale of the bulk of Iran's oil. And it is desperately trying to prevent Iran from completely scrapping its oil concession. This might set a precedent for similar action not only in the Middle East, but also in other areas of the world.

And the British are in no hurry to make a deal with Iran; the oil pool set up by the big U.S. firms has taken off the economic pressure. As long as Britain gets all its needs from the pool, it can get by without Iranian oil. True, it's costing a pretty penny—probably $350-million already. But over the long pull it feels this cost is justified.

• **Stakes**—The Iranian oil issue is not just a question of commercial bargaining. Both sides have more to think about than the dollars-and-cents angle.

Premier Mossadegh has a dangerous course to steer in Iran. The fate of his government, perhaps even his life, are at stake. The ailing Premier helped to whip Iranian public opinion into a frenzied hatred of the British. Now he has little room left to back down.

On the other hand, the longer a settlement is put off, the shakier Iran's finances become. And, once Anglo-Iranian cuts off its payroll (probably this month), Mossadegh will have labor unrest to cope with as well. These two things make Mossadegh vulnerable to attack from his political opponents in the Majlis.

• **Britain's Problems**—Britain's Labor government has a ticklish problem, too. And it has to be played out in terms of international, as well as domestic, politics.

Prime Minister Attlee has Britain's weakening position in the Middle East to consider. For example, Egypt is threatening to renounce its 1936 treaty with Britain, thus making good its demand that British troops leave the Suez Canal area and that London turn the Sudan over to Cairo. As the British figure it, a backdown in Iran now would encourage the Egyptians to run hog-wild.

Attlee, of course, has his political worries at home. He has been under strong pressure from the Conservatives to stop giving ground in the Middle East.

• **Russian Angle**—There's one thing that might force Attlee's hand in the Iranian situation: Conditions could get so chaotic as to be an open invitation to a Russian move. The odds are, though, that Iran can avoid economic and political chaos for several months more. So the British can be expected to stall for some time longer in the hope of getting better terms.

So far the Russians have played the Iranian crisis close to the vest. They keep prodding the Tudeh party to keep up the internal political temperature. But they have avoided any open approaches to Mossadegh, probably so as not to scare the West into making a deal. They seem to be hoping against hope that Iran will fall into their hands by default.

• **Real Danger**—There's a real danger, of course, that it will. If the economic situation gets bad enough in Iran, the government may be forced to invite the Russians in to operate the Abadan refinery. There is also a threat that the Iranians may try to blackmail Britain by making a phony offer to Russia, then be forced by popular pressure to go through with it.

Russia undoubtedly would get a windfall in Iran, especially if it got the refinery. Though it would take years before the Russians could exploit the Iranian crude, it's a sure bet that they would find ways of exporting aviation gas from Abadan immediately.

• **U.S. Interest**—The U.S., like Britain, has both political and commercial interests at stake in Iran.

Harriman's first objective when he went to Tehran was to keep the Iranians from talking to Moscow. And so far he's succeeded in that.

Harriman's second goal was to get a British-Iranian deal, if at all possible. So far, he's failed at that, thus jeopardizing the success he achieved on the first count. But any deal the Iranians would have accepted last week would inevitably have displeased the big U.S. oil companies. They are bitterly opposed to any solution that would reward oil nationalization in Iran.

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And although we've never been able to measure the effectiveness of any direct mail advertising, we've also never had anyone *thank* us for it—until now.

David Kimble, Station WBBM, Chicago, Ill.

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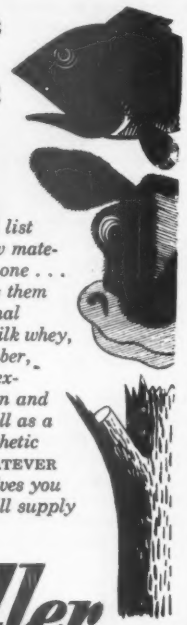

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GUERRILLAS like these who fought the Dutch now battle their own government in . . .

Indonesia's Reign of Terror

Marauders are laying waste to farms, labor unrest is widespread in cities. Army may set up strong-arm regime. Meanwhile, government plans are stymied.

Indonesia is in serious trouble—so serious that it may soon have to knuckle down to a military dictatorship or be swamped by the tide of Asian communism.

• **Marauders**—The government's authority, both physical and moral, is slipping away in many parts of this new nation. Men who were promised the moon in their fight against the Dutch have become disillusioned and have taken up arms again. Marauding bands of ex-guerillas are laying waste to farms and plantations, stifling the will to produce, and starving the cities for food. Farmers, themselves, have swapped their wooden plows for guns. And defections from the underpaid army and police have become frequent.

In the cities, labor unrest is widespread, due partly to the shortage of rice and other necessities. Chinese-directed Communists are exploiting this situation for all it's worth. It is a fact that Peiping agents have been identified as leaders of all the major strikes. They are behind demands, made on foreign employers in all seriousness, that workers be given paid vacations in Europe. Recently, they have taken a hand in terrorist activities, too.

• **Stymie**—Rehabilitation of the important sugar industry has hardly started. Production today is only half enough to fill Indonesia's sugar bowls. Before the Japanese occupation, this area supplied not only enough for its own needs but also 11% of all sugar entering the world market.

Production of copra, palm oil, coffee, tobacco, and fibers is also lagging far behind prewar averages. Only tin, rubber, petroleum, and bauxite—produced in compact and easily policed areas—have fully recovered.

The high prices Indonesia had been getting for its rubber and tin provided a bright spot for a while. But the deflation in world commodity markets lowered rubber and tin prices to near production costs. In turn, this has cut the nation's ability to buy the imports it needs.

• **Instability**—Governments in Indonesia have been almost as unstable as in postwar France. Foreign observers believe that there will be no solution until there is a really strong man at the top and an efficient administration.

At the moment, Indonesia has an unwieldy and overstaffed bureaucracy. One trouble is duplication. The civil services of the former Dutch and Republican administrations were merged, and all officials kept on the payroll.

It's this inept and corrupt bureaucracy that has the Indonesian army straining at the leash to take over. Army leaders think that if they were allowed to use strong-arm methods the bandits could be licked, and production restored.

• **Red Weaknesses**—The Communists probably don't have much chance of

getting control so long as the army maintains its present attitude. What's more, the Indonesian Reds lack two selling points that have aided communism in other parts of Asia: (1) There are no foreign imperialists to be driven out; (2) there are practically no landless peasants to be sold on the redistribution of land. If the smallholder still has the status of an underdog, it's due not to lack of land, but to technical backwardness and to the bad treatment he gets from moneylenders and middlemen.

The government has worked out emergency plans to improve the smallholders' lot by better distribution, both of the things he buys and the things he sells. And it will offer cooperative credit facilities and agricultural extension services.

• **Industrial Plan**—The next step is to implement an integrated plan for limited industrialization. The government's aim is to cushion Indonesia's agrarian economy against fluctuating world prices for its exports.

The plan—worked out by the Indonesian economist, Dr. Sumitro—provides for reorganization of existing industries and for broadening the industrial structure. To start with, small industries will be encouraged to merge. Engineering and management know-how will come from foreign experts and from Indonesians trained abroad. Research laboratories and training centers are being set up to assist small industries. At least $20-million will be used in granting credits to workshop centers engaged in weaving, ceramics, iron and copper works, tanning, and rubber processing.

New industries scheduled before the end of 1952 include: six printing plants, seven rubber sheeting plants, one Portland cement kiln, which will double cement capacity to 400,000 tons a year, a basket factory, a cotton-spinning mill, three knitting mills, and a jute bag mill.

• **Long Term**—The Sumitro Plan also has a long-term phase, which will extend beyond 1952. This calls for construction of an electrolytic caustic soda plant with an output of 15,000 tons a year; an ammonia sulfate plant to produce 50,000 to 60,000 tons a year; a steel mill with a capacity of 30,000 tons a year; and an aluminum plant with 10,000-ton capacity. In addition, the plan calls for a plywood factory, a paper mill, a glass factory, a tannic acid factory, and a big expansion of cotton spinning and knitting mills.

These long-term projects will need an investment of $50-million on top of the short-term $15-million.

• **Money**—Dr. Sumitro, author of the plan, has definite ideas about where the capital should come from. He admits that foreign investment is needed for the bigger projects. But he's not in

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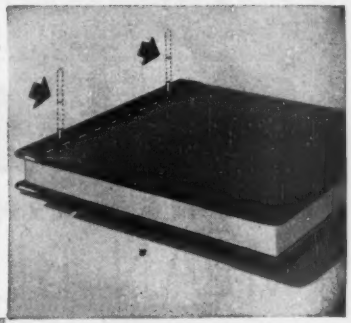

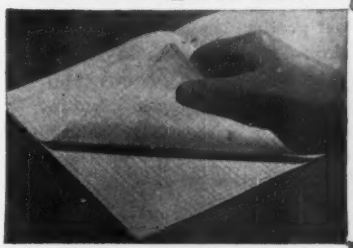

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favor of giving foreign investors an open field. He thinks the government should supply the bulk of funds and should control key industries such as cement, basic chemicals, steel, electric power, transportation, arms, and ammunition. If foreign interests accept minority participation, they are welcome.

As for the hoped-for new industries such as autos, tires, radio, electric light bulbs, and telephone equipment, Sumitro thinks that local private interests should have the control, even if they have to be grubstaked by the government. In other industrial fields, foreign investors won't get much encouragement unless they promise to train Indonesians for managerial and technical positions.

Where foreign interests want to invest on these terms, the government will guarantee foreign exchange for the transfer of profits and the withdrawal of capital.

• **Some Takers**—Given economic and political stability, some foreign firms may be willing to toe this Indonesian line. A few already have. The sales and service organization for Dodge and Willys is the Indonesian Service Corp., in which a local bank has 51% control. Scandinavian paper and cement interests have agreed to build plants on similar terms. But there won't be any more such projects unless the political and economic drift in Indonesia is arrested soon.

Treasury Asks Bill To Revise Tariff Rules

After two years' work, the Treasury Dept.'s Bureau of Customs has finally scraped the barnacles from our customs regulations. The bureau's recommendations for simplifying customs rigamarole are in the hands of the House Ways & Means Committee, and President Truman is pressing for early action.

At the moment, though, the odds are against any hustle. There's nothing like a tariff proposal—or a customs change—to make fur fly, in Congress and out. Besides, the Treasury Dept. recommendations are already under fire from the chemical and whiskey interests, which see a weakening of their protection.

The President's avowed aim in simplifying the red tape is to stimulate imports. Truman committed himself on this point during the 1949 devaluation crisis (BW—Oct.8'49,p105). The overhaul doesn't involve reductions in the actual tariff rates, but seeks to change regulations that grew out of the high tariff policy of the U. S. from the Civil War to the 1930s.

• **Single Standard**—The most important revision would scrap the double stand-

ard of valuations on those imported goods that have to pay an ad valorem duty (based on their value). Such goods are usually valued now at the higher of two figures: (1) Their foreign value, which is the home market wholesale price, or (2) their export value, which is the wholesale price at which they are offered for export.

Hereafter, the single, uniform basis for valuation would be the export value in the vast majority of cases. If export value can't be determined satisfactorily from the sale price of the goods in question, the appraiser would be allowed to use a figure based on prices paid by other importers of similar merchandise.

• **Chemical Gimmick**—The uniform method of valuation would eliminate a special valuation gimmick enacted by Congress in 1930 for the special benefit of the coal tar chemicals industry. This required imported dyes, medicinals, and other coal tar products to be valued on the American selling price, the price of competing domestic products.

The chemical industry is pressing the Ways & Means Committee not only to retain American selling price in the tariff schedule, but also to extend its application to the entire chemical list.

Spokesmen for the domestic industry argue that a schedule of rates based on export value would put them at the mercy of foreign competitors who could make dyes specially for the U. S. market and mark down their value to any figure that would crack that market.

• **Distillers Squawk**—Another provision has the domestic distillers up in arms. The Treasury proposes that the excise tax on imported whiskeys shall be reckoned on a proof gallon instead of a wine gallon basis. The switch would save Scotch and Canadian whiskey producers and importers more than $3 per case of fifths.

Domestic distillers say such a concealed reduction in favor of imported distilled spirits has no place in a customs simplification bill. Furthermore, they say, such a cut would cost some $18-million a year in revenue at a time when Congress is considering an increase in the domestic whiskey excise tax from $9 to $10.50 a proof gallon.

• **General Reforms**—The customs bill also takes care of all sorts of minor items that have irked importers for years:

• It allows clerical errors to be corrected both ways. Now no refunds are permitted when mistakes are in the government's favor.

• Marking requirements to show country of origin are greatly simplified.

• Shipments up to $250 value, instead of $100, would be permitted to take a short cut via "informal entry."

• Penalties for undervaluation would no longer be assessed against importers acting in good faith.

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Relief Rolls Are Booming, Too

The American economy is busting records all over the place. Production is running at a fabulous $325-billion a year. Employment is at an all-time high. Joblessness is heading toward the irreducible minimum.

AND, relief rolls are the biggest and costliest in our history. Over 5¼-million Americans are receiving public assistance in one form or another. The annual cost runs well over $2-billion.

Here is a paradox that we shouldn't lose sight of in our preoccupation with the more urgent business of coiling our springs against the menace of world communism.

The theory of the 1935 Social Security Act was this: As social insurance (such as old age and unemployment) covered more and more workers and as the economy staggered up from the pit of depression, the need for relief would fall away markedly. But instead of shrinking, the relief rolls have lengthened. Why?

There are some perfectly good and understandable reasons:

• In the last 10 years the population of this country has grown by 15%. Among the age groups that provide the bulk of relief recipients—those over 65 and the children—the increase has been above the average.

• Postwar inflation has shrunk the value of relief benefits so they have had to be increased. It has also forced onto the relief rolls more and more persons in the low income groups who couldn't increase their incomes to match rising prices.

• Increasingly rigid hiring policies (somewhat relaxed currently) have made it much harder for men and women over 65 to get a job.

It is clear by now that relief is no mere depression phenomenon. High demand for labor, such as at present, has little effect on these persons. Most of them cannot work or wouldn't be taken on. The effect of general prosperity on them must be indirect at best, coming mainly from the improved ability of employed relatives to help with support.

But the failure of relief rolls to decline in times such as these breeds deep suspicions that there are many on the rolls who have no right to be there. Government-sponsored security programs easily corrupt citizens who are willing to make a career out of receiving public assistance. This is one of the weakest spots in the rationale of Big Government.

Right now the sovereign state of Indiana and the sovereign Federal Security Administrator, Oscar Ewing, are engaged in a bitter dispute over how to deal with one aspect of this problem. The Indiana legislature decreed relief rolls should be published in an effort to disclose fraud and induce relatives to bear the load wherever possible. This, says Ewing, runs afoul of the Social Security Act. The Senate has voted to set aside the prohibition. The House has not acted.

Other states have enacted laws that require financially able relatives to support the needy.

There is no simple solution. By now the responsibility of government—federal, state, and local—to relieve genuine need is recognized. But there is widespread uneasiness over the debauching of a worthy program by connivers.

It is not surprising in view of the public apathy surrounding this matter that corruption of the program enters in. It is only by increased attention on the part of the public that the needy will be cared for properly and protected from encroachment by the undeserving.

Unconstitutional Spuds

Grow a potato in Canada, and Maine thinks it a product to be barred from the state at all costs. Not so with the potato picker. He and his product are two very different kettles of fish chowder. Maine wants 3,000 Canadian diggers to come help harvest Maine potatoes. Her officials recently told Montreal of the deep affection down-easters feel for farmhands north of the border.

One trouble is that Maine men can get better pay in factories than in picking and sorting spuds. Another is that immigration laws have been tightened up. A third is that Canada needs her own workers. Labor is short there, too.

The Canadian government has promised to do all it can. If wages are high enough south of the border, the Canadians may succeed. If they do, it will put a crimp in their own economy.

But it won't change the Maine mind about Canadian potatoes. Maine thinks them plain unconstitutional.

For the Record

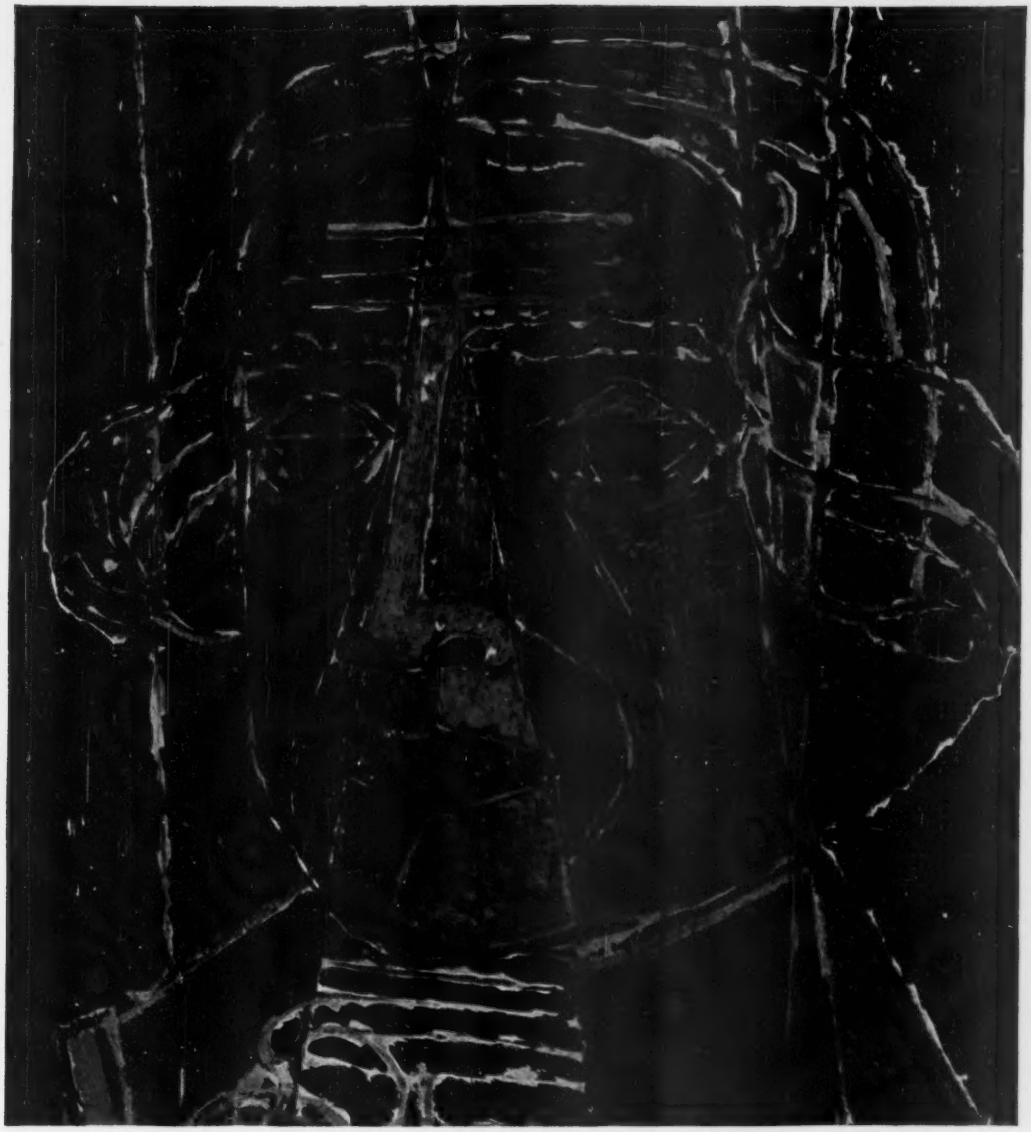
From the late summer's budget of news BUSINESS WEEK takes note of some acts of good leadership in Washington.

• High praise is in order for Rep. James P. Richards (D., S.C.), Chairman of the House Foreign Affairs Committee, for driving hard to put the huge new foreign aid program under one administrative tent.

• High praise for President Truman's veto of the bill to increase pensions for veterans with nonservice connected disabilities. This is mouldy ham, bad in principle, bad practice now, worse for the future. No praise at all for the 318 members of the House who voted to override the President.

• High praise for Sen. Paul H. Douglas (D., Ill.) for forcing test votes on the pork-barrel public works bills. It takes courage, such as he and those who voted with him showed, to carry preaching against government spending into practice.

ARTIST: HANS MOLLER



GREAT IDEAS OF WESTERN MAN . . . ONE OF A SERIES

THOMAS JEFFERSON *on truth and a free press* (LETTER TO GEORGE WASHINGTON, 1792)

No government ought to be without censors; and where the press is free, no one ever will. If virtuous, it need not fear the fair operation of attack and defense. Nature has given to man no other means of sifting out the truth, either in religion, law, or politics.

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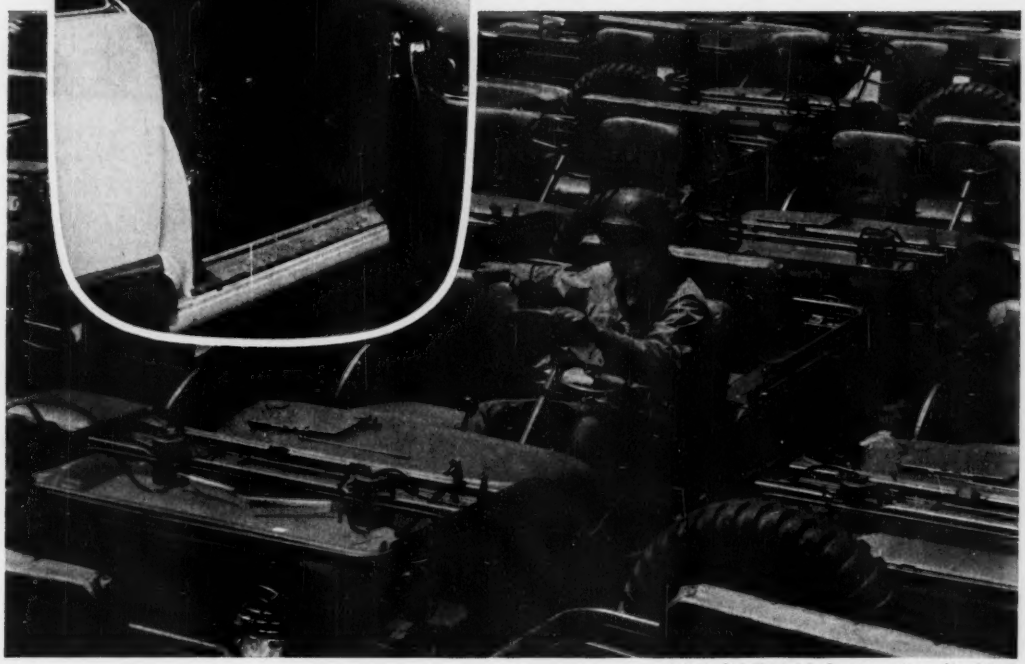
2 new ideas!



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ANYONE who sat in a World War II jeep in the rain hoped that some day a waterproof upholstery would come along. And here it is—another success for versatile Geon!

It's so good that it's used in new type submersible jeeps—water can't soak in or affect it. Nor will a blazing sun harm it. It won't crack or scuff. Soil or smudges wipe off easily. And Geon's exceptional wearing qualities make it equally adaptable for sturdy, colorful upholstery for passenger cars.

This remarkable upholstery is a fabric coated with Geon paste resin—a unique resin that is unusually easy and economical to process. No heavy or expensive mixing equipment is needed; this thermoplastic material is easily dispersed in plasticizers to make paste-like fluid. No solvents—no fire hazard.

You can mold, cast or use it for coating or dipping. It takes colors permanently—from the regulation olive drab to the rich, embossed texture pictured. Uses for Geon paste resin? . . . *plenty!*

Because of defense production, demand for Geon materials exceeds supply. But we can furnish limited quantities for development work. For information or technical advice, wherever specifications for vinyl materials are involved, please write Dept. A-9, B. F. Goodrich Chemical Company, Rose Bldg., Cleveland 15, Ohio. In Canada: Kitchener, Ontario. Cable address: Goodchemco.

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